Unanticipated Discovery Plan and Archaeological Monitoring Plan for Cultural Resources
Old American Zinc Plant Superfund Site and Surrounding Areas
Remediation Project, Saint Clair and Madison Counties, Illinois
WA No. 224-RDRD-B5A1/Contract No. EP-S5-06-01



October 4, 2018

Ch2

Amy C. Favret, M.A., RPA

Principal Investigator
1880 Waycross Road
Cincinnati, Ohio 45240

Contents

Figure 1

Project Overview

Section	Page	
Acron	nyms and Abbreviations	v
1	Unanticipated Discovery Plan	
2	Contact List	2-1
Figure	e	

AX0619181311MKE iii

Acronyms and Abbreviations

CH2M HILL Engineers, Inc.

Council Advisory Council on Historic Preservation

EPA Environmental Protection Agency

IHPA Illinois Historic Preservation Agency

NHPA National Historic Preservation Act

NPS National Park Service

NRHP National Register of Historic Places

OAZ Old American Zinc

QPA Qualified Professional Archeologist

UDP Unanticipated Discovery Plan

AX0619181311MKE v

Unanticipated Discovery Plan

Section 106 of the National Historic Preservation Act (NHPA) is identified in the U.S. Environmental Protection Agency (EPA) 2012 Record of Decision for the Old American Zinc Plant (OAZ) Superfund Site as an applicable or relevant and appropriate requirement, because of the nearby presence of the Cahokia Mounds State Historic Site, which is a National Historic Landmark and UNESCO World Heritage Site. The site is also listed as a historic property on the National Register of Historic Places (NRHP). A portion of the project area overlaps the boundary of Cahokia, as mapped by the Illinois Historic Preservation Agency (IHPA) and the NRHP. For EPA to meet the requirements of Section 106 of the NHPA, as defined in the Advisory Council on Historic Preservation (Council) regulations "Protection of Historic Properties" (36 Code of Federal Regulations Part 800), and following consultation with the Illinois State Historic Preservation Office (SHPO), the EPA has developed the following Unanticipated Discovery Plan (UDP) and Archaeological Monitoring Plan for use during soil sampling and related excavations in Saint Clair County and Madison County, Illinois. This plan will be implemented should new or additional historic properties be encountered during soil sampling, related excavation, and other ongoing activities on the proposed project (undertaking). This plan has been developed through consultation with the Illinois SHPO and in accordance with the regulations embodied in the "Protection of Historic Properties" issued by the Council (revised August 2004, www.achp.gov/regs-rev04.pdf). EPA and its cultural resources consultant, CH2M HILL, Inc. (CH2M), reviewed Illinois legislation (Illinois Complied Statues, Sections 3410, 3420, 3435, and 3440), which was used in the development of this UDP.

Termed "unanticipated discovery" or "post-review discovery," the identification of new or additional cultural resources during implementation of an undertaking typically occurs in the case of projects that involve excavation or ground-disturbing activities.

1.1 PROCEDURE WHEN CULTURAL MATERIALS ARE OBSERVED

The following measures will be implemented should an unanticipated cultural resource discovery be made by EPA, CH2M, any other contractor, or any subcontractor during construction of the proposed undertaking:

- 1. A Secretary of the Interior Qualified Archaeologist will be present during ground disturbing activities to monitor for the presence of previously undiscovered cultural resources.
- 2. The areal extent of all excavation areas should be recorded with GPS and dimensions measured. Excavated areas should be sketched on aerial photograph backdrops, as well. Profiles of excavation block walls will not be necessary, but a general measurement of the depth of each excavation area should be recorded. Areal extent of exposure of B-horizon should be recorded within each excavation area if not entirely exposed.
- 3. ALL exposed features will be mapped in plan. This includes major historic Euro-American or modern disturbances such as old house foundations or yard features (privies, cisterns, etc.). When only historic Euro-American or modern features are encountered a sketch map will suffice, however feature dimensions and relative distances should be measured and noted on the map. Scaled plan maps will be made of all exposed Pre-Columbian features and deposits. Feature dimension should be measured, and any exposed material noted. Fill colors and textures should be described, as well.

AX0619181311MKE 1-1

- 4. If human remains are encountered, all work will cease in the area and the coroner and SHPO archaeologist will be notified. Additional details are provided in the section below.
- 5. In some instances, a feature or deposits may need to be formally excavated even if remediation excavations will not impact them further. These cases will likely be rare and may not occur at all. For example, if an extraordinary artifact (i.e. figurines, tool caches, whole pots, etc.) is exposed at the top of a feature it should not be left in place. In some cases, excavation of the feature may be warranted (pit with a figurine, for example). The archaeologist may consult with the SHPO to determine the appropriate action for a feature or extraordinary artifact.
- 6. At the end of the 2018 work, a summary of monitoring activities will be prepared that, minimally, includes digitized maps showing the location of all observed excavated areas and feature plans.
- 7. Following the completion of the 2018 work, a plan will be developed for work to be conducted in 2019 in consultation with the Illinois SHPO.

In the case of an unanticipated discovery of human remains, EPA and CH2M will follow all relevant state and federal law, and recommendations regarding treatment of human remains as referenced above. EPA recognizes the importance of providing careful and respectful treatment for human remains recovered as an unanticipated discovery or as part of an archaeological investigation. In the event of an unanticipated discovery of human remains, EPA will consult with the NPS and IHPA as to the appropriate federally recognized tribes or other groups with which to consult. In coordination with the NPS, the IHPA, and other interested parties, a decision will be made for the treatment of the remains (for example, reburial, preservation in place, scientific study, sacred ritual, or a combination thereof). This protocol includes the following:

- 1. Should human remains be encountered, work in the general area of the discovery will stop immediately and the location will be immediately secured and protected from damage and disturbance. The area will be marked off with flagging, tape, or construction fencing.
- 2. The archaeologist will notify the coroner and SHPO archaeologist, Jeff Kruchten. Mr. Kruchten will contact Ms. Cobb, IDNR Archaeologist, who oversees the Human Skeletal Remains Protection Act. She will coordinate once the Coroner transfers jurisdiction.
- 3. Human remains, or associated artifacts will be left in place and not disturbed. No skeletal remains or materials associated with the remains will be collected or removed until appropriate consultation has taken place and a plan of action has been developed.
- 4. The coroner and SHPO archaeologist will make the official ruling on the nature of the remains, being either forensic or archaeological.
- 5. If human remains are determined to be Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated. The EPA will consult with the NPS, SHPO, and federally recognized tribal groups to develop a plan of action that is consistent with the Native American Graves Protection and Repatriation Act.

If human remains are determined to be non-Native American, the remains will be left in place and protected from further disturbance until a plan for their avoidance or removal can be generated in consultation with the Coroner, the IHPA, and other appropriate parties. Historic research and consultation with local authorities and historic experts will be conducted by Amy Favret, M.A., an archaeologist qualified to excavate and analyze human remains in Illinois, to try to determine the possible identity and affiliation of the remains and determine if there are any lineal descendants who should be consulted concerning the treatment of the remains. Notice of the discovery will be published in local media outlets for at least 3 days to assist in identification of lineal descendants.

1-2 AX0619181311MKE

Contact List

EPA Environmental Contact

Sheila Desai, EPA 77 West Jackson Boulevard Chicago, IL 60604-3507 Email: desai.sheila@epa.gov

Phone: 312-353-4150

NPS Contact

Bob Bryson, Ph.D., RPA
Associate Regional Director, Cultural Resources
Midwest Regional Office
601 Riverfront Drive
Omaha, NE 68102
Email: robort, bryson@nps.gov

Email: robert_bryson@nps.gov Phone: 402-661-1902 (Omaha, M-W) 402-437-5392 x107 (Lincoln, Th-F)

402-405-2136 Cell

Illinois Historic Preservation Agency Contact

Jeffrey Kruchten
Chief Archaeologist
Illinois State Historic Preservation Office
Illinois Department of Natural Resources
1 Natural Resources Way
Springfield, Illinois 62702-1271
Email: Jeffery.Kruchten@illinois.gov

Phone: 217-785-1279

Illinois Department of Natural Resources

Dawn Cobb

HSRP Coordinator, Archaeologist Email: dawn.cobb@illinois.gov

Phone: 217-785-4992

St. Clair County Coroner

Calvin Dye 10 Public Square Belleville, Illinois 42220 Phone: 618-277-8682

Madison County Coroner

Steve Nonn 157 N Main Street #354 Edwardsville, Illinois 62025

AX0619181311MKE 2-1

Email: spnonn@co.madison.il.us

Phone: 618-692-7478

Other Interested Parties

CH2M Contact

Amy C. Favret, M.A., RPA Senior Archaeologist, Principal Investigator CH2M 1880 Waycross Road Cincinnati, Ohio 45240

Email: amy.favret@ch2m.com

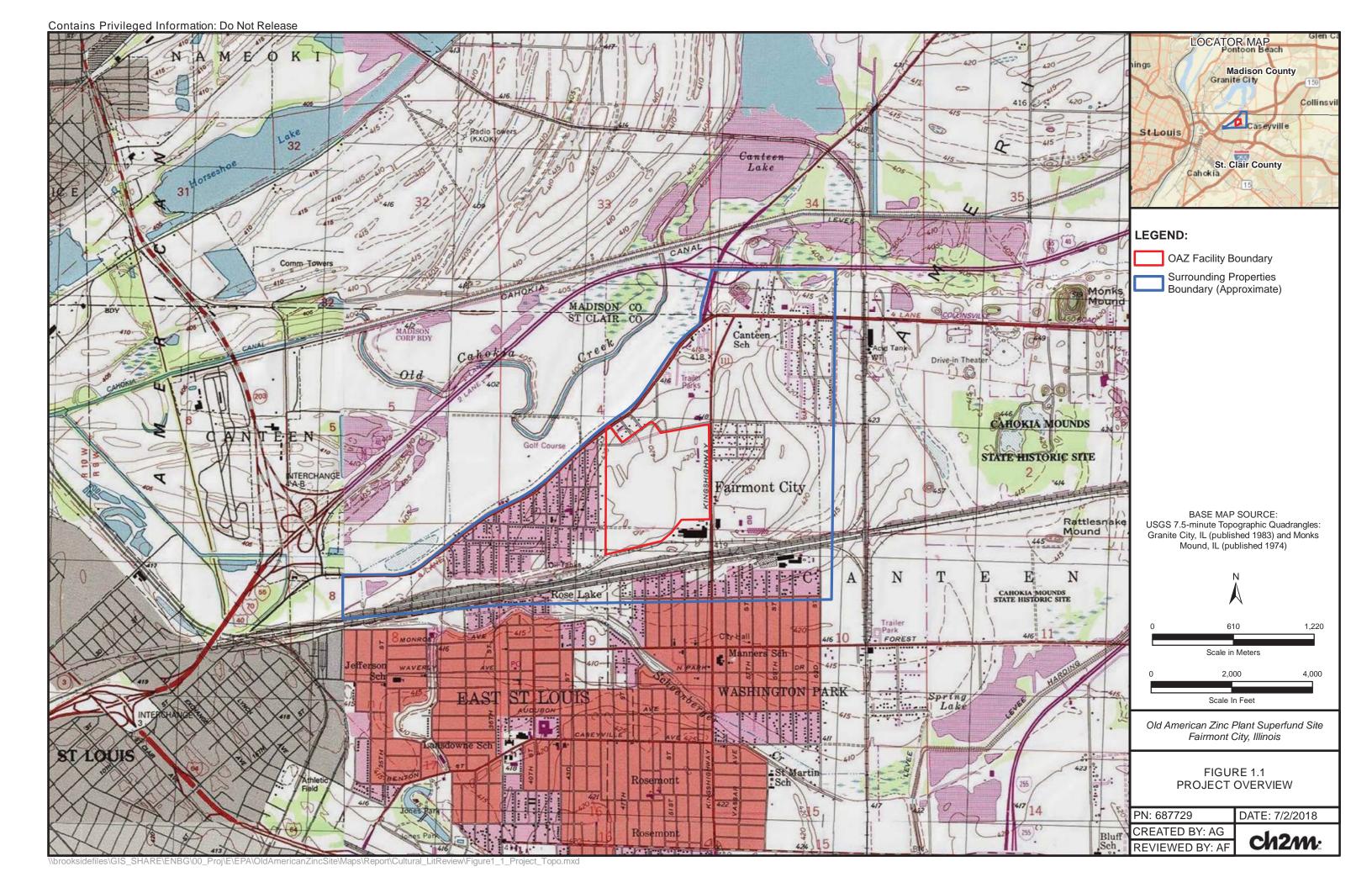
Phone: 513-595-5642

Rachel Grand Project Manager CH2M 501 N Broadway St. Louis, Missouri 63102 Email: rachel.grand@ch2m.com

Phone: 314-335-5069

AX0619181311MKE 2-2

Figure





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Illinois - Iowa Field Office 1511 47th Avenue Moline, Illinois 61265 Phone: (309) 757-5800 Fax: (309) 757-5807



IN REPLY REFER

Ms. Sheila Desai U.S. Environmental Protection Agency, Region 5 November 14, 2018 Electronic Mail

Ms. Desai,

Thank you for your request for concurrence that the Old American Zinc (OAZ) Plant Superfund Site Surrounding Properties and Facility Area (FA) Remedial Action Project (Project), is not likely to adversely affect the Indiana bat (Myotis sodalis) and northern long-eared bat (Myotis septentrionalis).

The project involves the excavation of contaminated surface soils at residential and commercial properties and alleyways in the Surrounding Properties area and the removal of vitrified slag, redistributed ground slag, affected soils, and sediments from drainage ditches and Rose Creek within the FA. The project area covers an estimated 35 acres.

In the Surrounding Properties, no mature trees greater than 4 inches diameter at breast height will be removed. On the FA, a limited number of mature trees will be removed. To minimize impacts to Indiana bats, tree clearing within the FA will be restricted from April 1 — September 30. If tree removal must be conducted during that timeframe, potential roost trees will be visually assessed. If no bats are observed, clearing can commence. If bats are observed, tree removal will be postponed until after October 1, to the extent practicable.

Based on the above information, we concur that the Old American Zinc Remedial Action Project, as described in your letter, is not likely to adversely affect the Indiana or northern long-eared bats. The federally endangered decurrent false aster is also known to occur within the project area, but the project will have no effect on this species due to lack of suitable habitat.

This precludes the need for further action on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. If project plans change or portions of the proposed project were not evaluated, it is our recommendation that the changes be submitted for our review.

These comments are provided in accordance with the Endangered Species Act of 1973 (87 Stat. 884, as amended; 16 U.S.C. 1531 <u>et seq</u>). If you have any questions regarding these comments, please contact me at the email address or the number below.

Aleshia Kenney U.S. Fish & Wildlife Service Illinois - Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265

ph: 309-757-5800 x 218 fax: 309-757-5807

aleshia_kenney@fws.gov



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 5 77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TOSTREGITENTION OF:

November 13, 2018

U.S. Fish and Wildlife Service Attn: Review and Compliance Southern Illinois Sub-Office 8588 Route 148 (mailing) Marion. Illinois 62959

Subject: Endangered Species Act Coordination and Migratory Bird Treaty Act Compliance

Old American Zinc Plant Superfund Site Fairmont City and Washington Park, Illinois

Surrounding Properties and Facility Area Remedial Actions

Dear Sir or Madam:

This letter is a revised consultation request for the U.S. Fish and Wildlife Service (USFWS) under the Migratory Bird Treaty Act and the Endangered Species Act of 1973 regarding our approach to federally protected species that possibly may be impacted by the Old American Zinc (OAZ) Plant Superfund Site Surrounding Properties and Facility Area (FA) Remedial Action Project (Project). The Project is being performed by the U.S. Environmental Protection Agency (EPA) or its contractors and/or representatives in accordance with a Record of Decision (ROD) dated September 11, 2012. EPA submitted an initial consultation request to USFWS on September 21, 2018. USFWS requested a revision to the Indiana bat section below. This letter has been revised to include that request.

The Project is in Fairmont City and Washington Park in St. Clair County, Illinois, and a nearby portion of Madison County, Illinois (**Figure 1**). The selected remedy for the Surrounding Properties involves the excavation of surface soils contaminated with arsenic, cadmium, lead, and/or zinc at residential and commercial properties and alleyways in the area. Vegetation clearing would be required to address human health concerns due to contamination levels in the soil. The selected remedy for the FA involves the removal of vitrified slag, redistributed ground slag, affected soils, and sediments from drainage ditches and Rose Creek within the FA, consolidation of FA and Surrounding Properties materials within a 35-acre consolidation area to be in the southwest portion of the FA, and design of a stormwater management system. EPA is currently in the Remedial Design phase of the Project which will be followed by the Remedial Action. It is anticipated that remediation will begin in 2019 and continue through late 2022.

Threatened and Endangered Species

Based on the official species list generated through the USFWS Information for Planning and Consultation (IPaC) system, the federally threatened and endangered species listed in Table 1 may occur at or near the Project site. No critical habitat has been identified within the Project area.

Table 1 - IPaC Results

Common Name	Scientific Name	Threatened and Endangered Status
Indiana Bat	Myotis sodalis	Endangered
Northern Long-eared Bat	Myotis septentrionalis	Threatened
Least Tern	Sterna antillarum	Endangered
Pallid Sturgeon	Scaphirhynchus albus	Endangered
Spectaclecase (mussel)	Cumberlandia monodonta	Endangered
Illinois Cave Amphipod	Gammarus acherondytes	Endangered
Decurrent False Aster	Boltonia decurrens	Threatened
Eastern Prairie Fringed Orchid	Platanthera leucophaea	Threatened

The following sections contain EPA's determination on the potential effects of the above-listed species.

No Adverse Effect

Indiana Bat

The Project is not within the final critical habitat for the Indiana bat. The Project will take place on the OAZ FA and Surrounding Properties and alleyways. Indiana bats hibernate in limestone caves, and pregnant females migrate to trees that serve as maternity colonies throughout the summer. Suitable roosting areas include under tree bark and in cavities or crevices of live and dead trees. Vegetation clearing would be required. In the Surrounding Properties, no mature trees greater than 4 inches diameter at breast height will be removed; as such, no potential roost trees would be impacted. On the FA, a limited number of mature trees will be removed. To minimize impacts to Indiana bat, conservation measures will be implemented. These include restricting tree clearing in the FA during April 1 – September 30. If tree removal cannot be conducted during that timeframe, potential roost trees will be visually assessed. If no bats are observed, clearing can commence. If bats are observed, tree removal will be postponed until after October 1, to the extent practicable. With the implementation of these conservation measures, it is not anticipated that the Project will have any adverse impacts on Indiana bat and their habitat.

Northern Long-eared Bat

The northern long-eared bat was listed after the ROD was issued and was not considered in the ROD. The Project is within the White-Nose Zone identified for the northern long-eared bat. Based on the Final 4(d) Rule, it would be considered an incidental take if tree-removal activities include one or both of the following: (1) removing a northern long-eared bat known occupied maternity roost tree or any trees within 150 feet of a known occupied maternity roost tree from June 1 through July 31, or (2) removing any trees within 0.25 mile of a northern long-eared bat hibernaculum at any time of the year. Based on the Illinois Natural Department of Natural

Resources Ecological Compliance Assessment Tool, northern long-eared bat habitat was not identified on or within the vicinity of the site. The Project does not propose to remove any known occupied maternity roost trees or remove any trees near hibernaculum; therefore, it would have no effect on this species.

Least Tern

Suitable habitat for the interior population of least terns includes barren to sparsely vegetated sandbars along rivers, sand and gravel pits, lake and reservoir shorelines, and occasionally gravel rooftops. The proposed action is located within a highly residential neighborhood and a highly industrialized property, and the existing land use and vegetation is characterized by maintained manicured lawns in the Surrounding Areas, and by sparsely vegetated land in the FA. Suitable habitat is unlikely to be present, and the Project activities are expected to have no adverse effect on least terns.

Pallid Sturgeon

Pallid sturgeon inhabit large silty rivers. Sediment removal is proposed within drainage ditches and Rose Creek, which are located in the FA. However, these waterbodies lack the necessary habitat to support pallid sturgeon; therefore, the Project is expected to have no adverse effects on this species. Additionally, erosion-control measures will be implemented during soil-disturbing activities to further protect water quality and indirect effects to pallid sturgeon.

Spectaclecase Mussel

Spectaclecase mussels are found in large rivers and are often found clustered in firm mud and sheltered beneath rock slabs, boulders, or under tree roots. Based on the USFWS IPaC results, spectaclecase mussels do not occur in the FA area, which is where proposed in-water work would occur. The project is expected to have no adverse effects on spectaclecase mussels. Additionally, erosion control measures will be implanted during soil-disturbing activities to protect water quality and mitigate indirect effects.

Illinois Cave Amphipods

This species lives in caves. This species is known to occur in three caves in Monroe County and was formerly found in St. Clair County, Illinois. Main threats to this species include water pollution from agricultural chemicals, septic systems, and dumping. The proposed action directly addresses water quality by removing soil contamination from the area. To further protect water quality, erosion and sediment control measures will be implemented during construction activities. Therefore, the Project is unlikely to have an adverse effect on Illinois cave amphipod.

Decurrent False Aster

Decurrent false asters inhabit moist, sandy floodplains and prairie wetlands along the Illinois River. Plant populations are heavily influenced on the annual fluctuations of the conditions and dynamic of the Illinois River hydrology. The biggest threats to this species include habitat destruction and topsoil runoff. The National Wetlands Inventory Mapper indicates that there are freshwater wetlands (PEM1C) in the OAZ south (Washington Township) section of the Project, the northern end of the FA, and other small pocket wetlands are likely to occur within the Project area. None of these are likely to provide suitable habitat for the decurrent false aster because none would be subject to river flooding, and none would be hydrologically influenced by the Illinois River. The Project is not expected to have an adverse effect on the decurrent false aster.

Eastern Prairie Fringed Orchid

The eastern prairie fringed orchid occurs in mesic to wet prairies, sedge meadows, fen, marsh, or marsh edges. Optimal habitat includes sunny wet meadows with grass and sedge dominated communities. However, this species has even been documented growing along roadside ditches that may provide this type of habitat. According to the National Wetlands Inventory Mapper, there is a freshwater emergent wetland (PEM1C) in the OAZ south (Washington Township) section and northern end of the FA. Based on review of historical aerial photography, wetlands present within the Project area are unlikely to provide suitable habitat for eastern prairie fringed orchid due to the disturbed conditions, encroachment of woody species, and apparent hydrology. Review of aerial photographs indicates that the wetlands flood to standing water conditions in late winter/early spring and then dry in summer and lack wet meadow characteristics during the typical growth period for the orchid. The project specifications will require that a wetland delineation be performed to confirm the presence and extent of wetlands prior to ground disturbance. It is likely that small pocket wetlands will be identified within the Project area, but none are likely to be suitable to support eastern prairie fringed orchid. Because the eastern prairie fringed orchid would not occur in the Project area, no adverse effects to this species would result.

Migratory Birds

Several migratory birds are identified on the USFWS IPaC resource list as potentially being present in the Project area. The typical breeding season ranges from April 1 to September 10. Two species that may occur in the Project area breed outside of the typical breeding season. The least bittern breeds from August 16 to October 31, and the bald eagle breeds from October 15 to August 31. The least bittern is a Bird of Conservation Concern only in particular Bird Conservation Regions. The least bittern is unlikely to occur in the Project area during its breeding season; therefore, migratory bird nesting would not occur past September 10. The bald eagle is not a Bird of Conservation Concern; however, it warrants special attention because it has a probability of presence in the Project area from October through August. Bald eagles typically nest in tall trees along major bodies of water and typically do not nest in areas where pedestrian human activity is high. The residential areas where trees would be removed are subject to pedestrian human activity. The FA is a former industrial area and tree removals are necessary for the FA remedial action. There are no known bald eagle nests in the immediate area, and nesting is unlikely due to the nature of the properties and the level of human activity.

Because the least bittern and bald eagle would not nest in the Project area, only the typical breeding season is addressed. No mature trees greater than 4 inches diameter at breast height will be removed from the Surrounding Areas. Mature trees will be removed from the FA. Prior to the removal, an inspection will be performed during the preconstruction meeting and again within 24 hours prior to clearing in consultation with EPA or its representative. If bird nests are in trees or shrubs designated for removal or obstructions that will be temporarily relocated and stored, the nests will be inspected for the presence of eggs or hatchlings. Written documentation of the inspection will be provided to EPA or its representative. If present, active nests will not be disturbed; the clearing will be halted, and EPA or its representative will consult with the Marion, Illinois, Field Office of the USFWS and other appropriate agencies to assure compliance with the Migratory Bird Treaty Act.

A copy of the prefinal remedial design report can be provided to the USFWS upon request. If USFWS has any questions or requires any additional actions or consultations, please contact me at:

U.S. EPA Region 5 Superfund Division Remedial Project Manager 77 W. Jackson Blvd., SR-6J Chicago, IL 60604 T: 312.353.4150 E: desai.sheila@epa.gov

Sincerely,

Sheila Desai

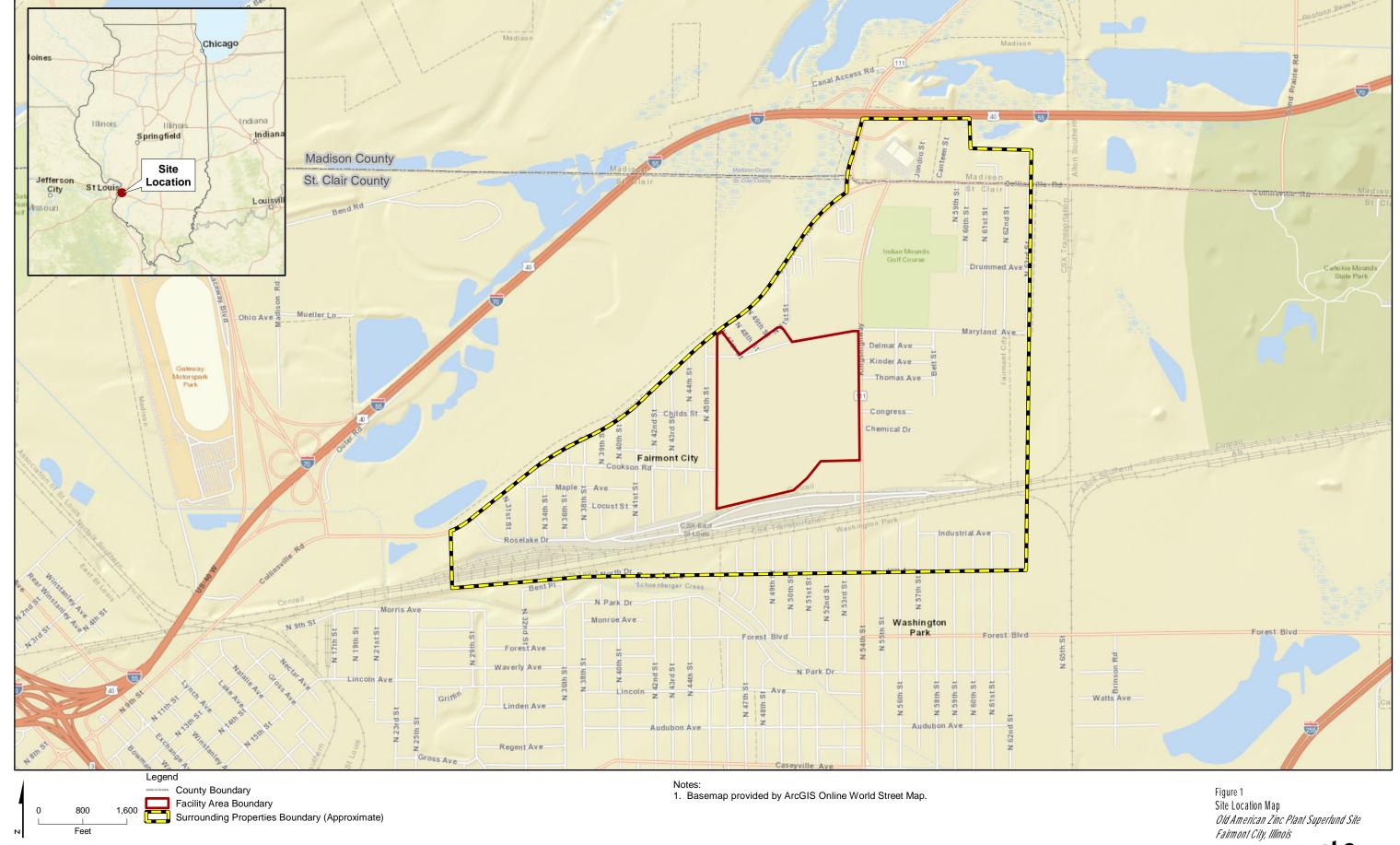
EPA Remedial Project Manager

heil Desai

cc: Rachel Grand/CH2M Site Manager (e-mail)

Enclosures: Figure 1 – Site Location Map

Attachment 1 – USFWS Official Species Lists





United States Department of the Interior

FISH AND WILDLIFE SERVICE

Illinois-Iowa Ecological Services Field Office Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022

Phone: (309) 757-5800 Fax: (309) 757-5807



In Reply Refer To: September 12, 2018

Consultation Code: 03E18000-2018-SLI-1788

Event Code: 03E18000-2018-E-03998

Project Name: OAZ Plant Superfund Site Surrounding Properties and Facility Area Remedial

Design

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects and projects that include installing towers that use guy wires or are over 200 feet in height, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.) and Migratory Bird Treaty Act (16 U.S.C. 703 et seq), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Illinois-Iowa Ecological Services Field Office

Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 (309) 757-5800

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Southern Illinois Sub-Office

Marion Illinois Sub-office 8588 Route 148 Marion, IL 62959-5822 (618) 997-3344

Project Summary

Consultation Code: 03E18000-2018-SLI-1788

Event Code: 03E18000-2018-E-03998

Project Name: OAZ Plant Superfund Site Surrounding Properties and Facility Area

Remedial Design

Project Type: Superfund Site Remediation

Project Description: Selected remedy for Surrounding Properties includes excavation of

surface soils contaminated with arsenic, cadmium, lead and/or zinc at approximately 75 residential properties and 10 alleyways in the area. Additional properties and alleyways will be planned pending analytical results. Vegetation clearing will be required to address contamination in soils. Selected remedy for the Facility Area (FA) involves removal of vitrified slag, redistributed ground slag, affected soils, and sediments from drainage ditches and Rose Creek within the FA, placing of FA and Surrounding Areas materials within a 35-acre consolidation area located in the SW portion of the FA, and design of a storm water management system.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.65079517644201N90.09332892233155W



Counties: Madison, IL | St. Clair, IL

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME STATUS

Indiana Bat Myotis sodalis

Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/5949

Northern Long-eared Bat Myotis septentrionalis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME STATUS

Least Tern Sterna antillarum

Endangered

Population: interior pop.

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8505

Fishes

NAME STATUS

Pallid Sturgeon Scaphirhynchus albus

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7162

Crustaceans

NAME STATUS

Illinois Cave Amphipod Gammarus acherondytes

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8412

Flowering Plants

NAME STATUS

Decurrent False Aster Boltonia decurrens

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7705

Eastern Prairie Fringed Orchid Platanthera leucophaea

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

and Alaska.

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The <u>Bald and Golden Eagle Protection Act</u> of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the <u>USFWS</u> <u>Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	BREEDING SEASON
American Bittern <i>Botaurus lentiginosus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6582	Breeds Apr 1 to Aug 31
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA	Breeds elsewhere

Event Code: 03E18000-2018-E-03998

NAME	BREEDING SEASON
Bald Eagle <i>Haliaeetus leucocephalus</i> This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626	Breeds Oct 15 to Aug 31
Bobolink <i>Dolichonyx oryzivorus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 20 to Jul 31
Buff-breasted Sandpiper <i>Calidris subruficollis</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9488	Breeds elsewhere
Dunlin <i>Calidris alpina arcticola</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Eastern Whip-poor-will <i>Antrostomus vociferus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 1 to Aug 20
King Rail <i>Rallus elegans</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/8936	Breeds May 1 to Sep 5
Least Bittern <i>Ixobrychus exilis</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6175	Breeds Aug 16 to Oct 31
Lesser Yellowlegs <i>Tringa flavipes</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9679	Breeds elsewhere
Prothonotary Warbler <i>Protonotaria citrea</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds Apr 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds May 10 to Sep 10

NAME	BREEDING SEASON
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12

- (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

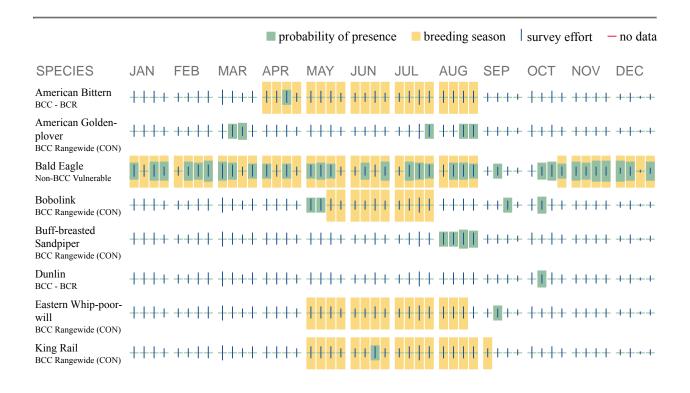
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

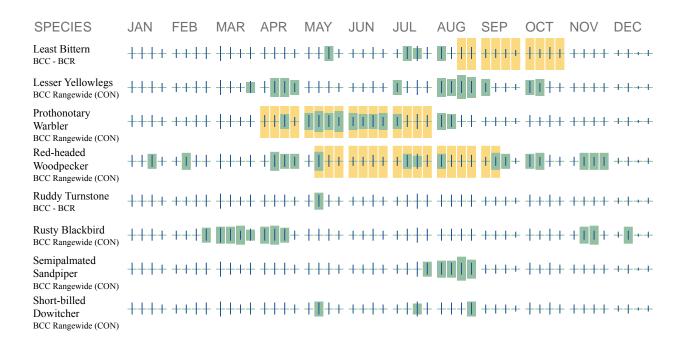
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern</u> (<u>BCC</u>) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>E-bird Explore Data Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of survey, banding, and citizen science datasets.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell

me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

- PEM1Ax
- <u>PEM1C</u>
- PEM1Cd
- PEM1Cx
- PEM1Fx

FRESHWATER POND

- PUBFx
- PUBGx

RIVERINE

R4SBCx



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Southern Illinois Sub-Office Marion Illinois Sub-office 8588 Route 148 Marion, IL 62959-5822

Phone: (618) 997-3344 Fax: (618) 997-8961

http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html



In Reply Refer To: September 12, 2018

Consultation Code: 03E18100-2018-SLI-0697

Event Code: 03E18100-2018-E-01706

Project Name: OAZ Plant Superfund Site Surrounding Properties and Facility Area Remedial

Design

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat. Under the ESA, it is the responsibility of the Federal action agency or its designated respresentative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects and projects that include installing towers that use guy wires or are over 200 feet in height, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Southern Illinois Sub-Office

Marion Illinois Sub-office 8588 Route 148 Marion, IL 62959-5822 (618) 997-3344

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Illinois-Iowa Ecological Services Field Office

Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 (309) 757-5800

Project Summary

Consultation Code: 03E18100-2018-SLI-0697

Event Code: 03E18100-2018-E-01706

Project Name: OAZ Plant Superfund Site Surrounding Properties and Facility Area

Remedial Design

Project Type: Superfund Site Remediation

Project Description: Selected remedy for Surrounding Properties includes excavation of

surface soils contaminated with arsenic, cadmium, lead and/or zinc at approximately 75 residential properties and 10 alleyways in the area. Additional properties and alleyways will be planned pending analytical results. Vegetation clearing will be required to address contamination in soils. Selected remedy for the Facility Area (FA) involves removal of vitrified slag, redistributed ground slag, affected soils, and sediments from drainage ditches and Rose Creek within the FA, placing of FA and Surrounding Areas materials within a 35-acre consolidation area located in the SW portion of the FA, and design of a storm water management system.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.65079517644201N90.09332892233155W



Counties: Madison, IL | St. Clair, IL

Endangered Species Act Species

There is a total of 9 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

Event Code: 03E18100-2018-E-01706

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat Myotis sodalis	Endangered
There is final critical habitat for this species. Your location is outside the critical habitat. Species profile: https://ecos.fws.gov/ecp/species/5949	
Northern Long-eared Bat Myotis septentrionalis	Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME STATUS

Least Tern Sterna antillarum

Endangered

Population: interior pop.

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8505

Reptiles

NAME STATUS

Eastern Massasauga (=rattlesnake) Sistrurus catenatus

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/2202

Threatened

Fishes

NAME STATUS

Pallid Sturgeon Scaphirhynchus albus

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7162

Endangered

Clams

NAME STATUS

Spectaclecase (mussel) Cumberlandia monodonta

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7867

Endangered

Crustaceans

NAME STATUS

Illinois Cave Amphipod Gammarus acherondytes

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8412

Endangered

Flowering Plants

NAME STATUS

Decurrent False Aster Boltonia decurrens

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7705

Threatened

Eastern Prairie Fringed Orchid Platanthera leucophaea

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601

Threatened

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Illinois-Iowa Ecological Services Field Office Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 Phone: (309) 757-5800 Fax: (309) 757-5807



In Reply Refer To: September 06, 2018

Consultation Code: 03E18000-2018-SLI-1754

Event Code: 03E18000-2018-E-03924

Project Name: Old American Zinc Superfund Site Facility Area

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website at - http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you

determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects and projects that include installing towers that use guy wires or are over 200 feet in height, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 et seq.) and Migratory Bird Treaty Act (16 U.S.C. 703 et seq), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website at http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries
- Migratory Birds
- Wetlands

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Illinois-Iowa Ecological Services Field Office

Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 (309) 757-5800

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Southern Illinois Sub-Office

Marion Illinois Sub-office 8588 Route 148 Marion, IL 62959-5822 (618) 997-3344

Project Summary

Consultation Code: 03E18000-2018-SLI-1754

Event Code: 03E18000-2018-E-03924

Project Name: Old American Zinc Superfund Site Facility Area

Project Type: Superfund Site Remediation

Project Description: The selected remedy for the FA involves removal of vitrified slag,

redistributed ground slag, and affected soils and sediments within the FA, removal of source material (slag used as fill) and placing within a 35-acre consolidation area located in the SW portion of the FA. Consolidation area will be capped and covered with a 25-inch low-permeability clay barrier, overlain by a 12-inch vegetative soil cover. Environmental Covenant will be placed on the groundwater and soil as an institutional

control.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.64773765457054N90.09792286222603W



Counties: St. Clair, IL

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME STATUS

Indiana Bat Myotis sodalis

Endangered

There is **final** critical habitat for this species. Your location is outside the critical habitat.

Species profile: https://ecos.fws.gov/ecp/species/5949

Northern Long-eared Bat Myotis septentrionalis

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME STATUS

Least Tern Sterna antillarum

Endangered

Population: interior pop.

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8505

Fishes

NAME STATUS

Pallid Sturgeon Scaphirhynchus albus

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7162

Crustaceans

NAME STATUS

Illinois Cave Amphipod Gammarus acherondytes

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8412

Flowering Plants

NAME STATUS

Decurrent False Aster Boltonia decurrens

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7705

Eastern Prairie Fringed Orchid Platanthera leucophaea

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

and Alaska.

DDEEDING

Migratory Birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described <u>below</u>.

- 1. The Migratory Birds Treaty Act of 1918.
- 2. The Bald and Golden Eagle Protection Act of 1940.
- 3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

The birds listed below are birds of particular concern either because they occur on the <u>USFWS</u> <u>Birds of Conservation Concern</u> (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ <u>below</u>. This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the <u>E-bird data mapping tool</u> (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found below.

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME	SEASON
American Bittern <i>Botaurus lentiginosus</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6582	Breeds Apr 1 to Aug 31
American Golden-plover <i>Pluvialis dominica</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA	Breeds elsewhere

BREEDING NAME **SEASON** Bald Eagle *Haliaeetus leucocephalus* Breeds Oct 15 This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention to Aug 31 because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities. https://ecos.fws.gov/ecp/species/1626 Bobolink *Dolichonyx oryzivorus* Breeds May 20 This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA to Jul 31 and Alaska. Buff-breasted Sandpiper Calidris subruficollis Breeds This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA elsewhere and Alaska. https://ecos.fws.gov/ecp/species/9488 Dunlin Calidris alpina arcticola **Breeds** This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions elsewhere (BCRs) in the continental USA Eastern Whip-poor-will Antrostomus vociferus Breeds May 1 to This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA Aug 20 and Alaska. King Rail *Rallus elegans* Breeds May 1 to This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA Sep 5 and Alaska. https://ecos.fws.gov/ecp/species/8936 Least Bittern *Ixobrychus exilis* Breeds Aug 16 This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions to Oct 31 (BCRs) in the continental USA https://ecos.fws.gov/ecp/species/6175 Breeds Lesser Yellowlegs *Tringa flavipes* This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA elsewhere and Alaska. https://ecos.fws.gov/ecp/species/9679 Prothonotary Warbler Protonotaria citrea Breeds Apr 1 to This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA Jul 31 and Alaska. Red-headed Woodpecker *Melanerpes erythrocephalus* Breeds May 10 This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA to Sep 10 and Alaska.

NAME	BREEDING SEASON
Ruddy Turnstone <i>Arenaria interpres morinella</i> This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA	Breeds elsewhere
Rusty Blackbird <i>Euphagus carolinus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Semipalmated Sandpiper <i>Calidris pusilla</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.	Breeds elsewhere
Short-billed Dowitcher <i>Limnodromus griseus</i> This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska. https://ecos.fws.gov/ecp/species/9480	Breeds elsewhere

Probability Of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

- 1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
- 2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12

- (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is 0.25/0.25 = 1; at week 20 it is 0.05/0.25 = 0.2.
- 3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

Breeding Season (

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

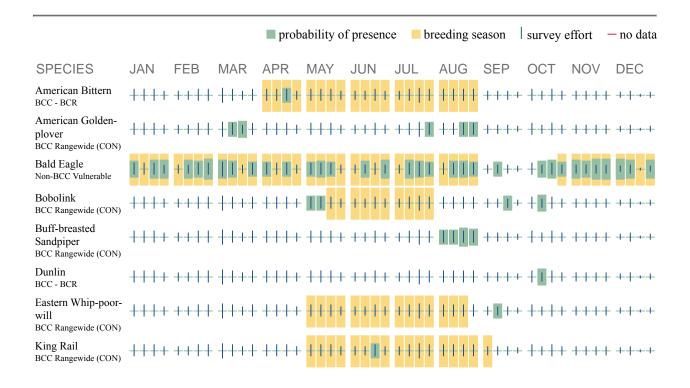
Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

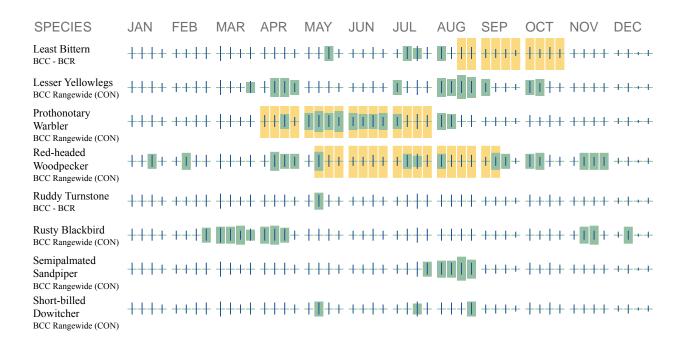
No Data (-)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird returns are based on all years of available data, since data in these areas is currently much more sparse.





Additional information can be found using the following links:

- Birds of Conservation Concern http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php
- Measures for avoiding and minimizing impacts to birds http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php
- Nationwide conservation measures for birds http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf

Migratory Birds FAQ

Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

Nationwide Conservation Measures describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. Additional measures and/or permits may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS <u>Birds of Conservation Concern</u> (<u>BCC</u>) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the <u>Avian Knowledge Network (AKN)</u>. The AKN data is based on a growing collection of <u>survey</u>, <u>banding</u>, <u>and citizen science datasets</u> and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle (<u>Eagle Act</u> requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the <u>E-bird Explore Data Tool</u>.

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the <u>Avian Knowledge Network (AKN)</u>. This data is derived from a growing collection of <u>survey, banding, and citizen science datasets</u>.

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The Cornell Lab of Ornithology All About Birds Bird Guide, or (if you are unsuccessful in locating the bird of interest there), the Cornell Lab of Ornithology Neotropical Birds guide. If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

- 1. "BCC Rangewide" birds are <u>Birds of Conservation Concern</u> (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
- 2. "BCC BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and

3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the <u>Eagle Act</u> requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the Northeast Ocean Data Portal. The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the <u>Diving Bird Study</u> and the <u>nanotag studies</u> or contact <u>Caleb Spiegel</u> or <u>Pam Loring</u>.

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to <u>obtain a permit</u> to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell

me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Wetlands

Impacts to <u>NWI wetlands</u> and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local <u>U.S. Army Corps of Engineers District</u>.

Please note that the NWI data being shown may be out of date. We are currently working to update our NWI data set. We recommend you verify these results with a site visit to determine the actual extent of wetlands on site.

FRESHWATER EMERGENT WETLAND

• <u>PEM1C</u>



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Southern Illinois Sub-Office Marion Illinois Sub-office 8588 Route 148 Marion, IL 62959-5822

Phone: (618) 997-3344 Fax: (618) 997-8961

http://www.fws.gov/midwest/Endangered/section7/s7process/step1.html



In Reply Refer To: September 06, 2018

Consultation Code: 03E18100-2018-SLI-0686

Event Code: 03E18100-2018-E-01668

Project Name: Old American Zinc Superfund Site Facility Area

Subject: List of threatened and endangered species that may occur in your proposed project

location, and/or may be affected by your proposed project

To Whom It May Concern:

The attached species list identifies any federally threatened, endangered, proposed and candidate species that may occur within the boundary of your proposed project or may be affected by your proposed project. The list also includes designated critical habitat if present within your proposed project area or affected by your project. This list is provided to you as the initial step of the consultation process required under section 7(c) of the Endangered Species Act, also referred to as Section 7 Consultation.

Section 7 of the Endangered Species Act of 1973 requires that actions authorized, funded, or carried out by Federal agencies not jeopardize federally threatened or endangered species or adversely modify designated critical habitat. To fulfill this mandate, Federal agencies (or their designated non-federal representative) must consult with the Service if they determine their project "may affect" listed species or critical habitat. Under the ESA, it is the responsibility of the Federal action agency or its designated respresentative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

Under 50 CFR 402.12(e) (the regulations that implement Section 7 of the Endangered Species Act) the accuracy of this species list should be verified after 90 days. This verification can be completed formally or informally. You may verify the list by visiting the ECOS-IPaC website

http://ecos.fws.gov/ipac/ at regular intervals during project planning and implementation and completing the same process you used to receive the attached list. As an alternative, you may contact this Ecological Services Field Office for updates.

Please use the species list provided and visit the U.S. Fish and Wildlife Service's Region 3 Section 7 Technical Assistance website http://www.fws.gov/midwest/endangered/section7/s7process/index.html. This website contains step-by-step instructions which will help you determine if your project will have an adverse effect on listed species and will help lead you through the Section 7 process.

For all wind energy projects and projects that include installing towers that use guy wires or are over 200 feet in height, please contact this field office directly for assistance, even if no federally listed plants, animals or critical habitat are present within your proposed project or may be affected by your proposed project.

Although no longer protected under the Endangered Species Act, be aware that bald eagles are protected under the Bald and Golden Eagle Protection Act (16 U.S.C. 668 *et seq.*) and Migratory Bird Treaty Act (16 U.S.C. 703 *et seq*), as are golden eagles. Projects affecting these species may require measures to avoid harming eagles or may require a permit. If your project is near an eagle nest or winter roost area, see our Eagle Permits website http://www.fws.gov/midwest/midwestbird/EaglePermits/index.html to help you determine if you can avoid impacting eagles or if a permit may be necessary.

We appreciate your concern for threatened and endangered species. Please include the Consultation Tracking Number in the header of this letter with any request for consultation or correspondence about your project that you submit to our office.

Attachment(s):

- Official Species List
- USFWS National Wildlife Refuges and Fish Hatcheries

Official Species List

This list is provided pursuant to Section 7 of the Endangered Species Act, and fulfills the requirement for Federal agencies to "request of the Secretary of the Interior information whether any species which is listed or proposed to be listed may be present in the area of a proposed action".

This species list is provided by:

Southern Illinois Sub-Office

Marion Illinois Sub-office 8588 Route 148 Marion, IL 62959-5822 (618) 997-3344

This project's location is within the jurisdiction of multiple offices. Expect additional species list documents from the following office, and expect that the species and critical habitats in each document reflect only those that fall in the office's jurisdiction:

Illinois-Iowa Ecological Services Field Office

Illinois & Iowa Ecological Services Field Office 1511 47th Ave Moline, IL 61265-7022 (309) 757-5800

Project Summary

Consultation Code: 03E18100-2018-SLI-0686

Event Code: 03E18100-2018-E-01668

Project Name: Old American Zinc Superfund Site Facility Area

Project Type: Superfund Site Remediation

Project Description: The selected remedy for the FA involves removal of vitrified slag,

redistributed ground slag, and affected soils and sediments within the FA, removal of source material (slag used as fill) and placing within a 35-acre consolidation area located in the SW portion of the FA. Consolidation area will be capped and covered with a 25-inch low-permeability clay barrier, overlain by a 12-inch vegetative soil cover. Environmental Covenant will be placed on the groundwater and soil as an institutional

control.

Project Location:

Approximate location of the project can be viewed in Google Maps: https://www.google.com/maps/place/38.64773765457054N90.09792286222603W



Counties: St. Clair, IL

Endangered

Endangered Species Act Species

There is a total of 7 threatened, endangered, or candidate species on this species list.

Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species.

IPaC does not display listed species or critical habitats under the sole jurisdiction of NOAA Fisheries¹, as USFWS does not have the authority to speak on behalf of NOAA and the Department of Commerce.

See the "Critical habitats" section below for those critical habitats that lie wholly or partially within your project area under this office's jurisdiction. Please contact the designated FWS office if you have questions.

1. <u>NOAA Fisheries</u>, also known as the National Marine Fisheries Service (NMFS), is an office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

Mammals

NAME	STATUS
Indiana Bat Myotis sodalis	Endangered
There is final critical habitat for this species. Your location is outside the critical habitat.	
Species profile: https://ecos.fws.gov/ecp/species/5949	
	TT1
Northern Long-eared Bat <i>Myotis septentrionalis</i>	Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/9045

Birds

NAME STATUS

Least Tern Sterna antillarum

Population: interior pop.

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8505

Fishes

NAME STATUS

Pallid Sturgeon Scaphirhynchus albus

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7162

Crustaceans

NAME STATUS

Illinois Cave Amphipod Gammarus acherondytes

Endangered

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/8412

Flowering Plants

NAME STATUS

Decurrent False Aster Boltonia decurrens

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/7705

Eastern Prairie Fringed Orchid Platanthera leucophaea

Threatened

No critical habitat has been designated for this species. Species profile: https://ecos.fws.gov/ecp/species/601

Critical habitats

THERE ARE NO CRITICAL HABITATS WITHIN YOUR PROJECT AREA UNDER THIS OFFICE'S JURISDICTION.

USFWS National Wildlife Refuge Lands And Fish Hatcheries

Any activity proposed on lands managed by the <u>National Wildlife Refuge</u> system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS OR FISH HATCHERIES WITHIN YOUR PROJECT AREA.

Appendix I Institutional Controls and Implementation Plan

Old American Zinc Plant Superfund Site Fairmont City, St. Clair County, Illinois Facility Area Remedial Design WA No. 224-RDRD-B5A1/Contract No. EP-S5-06-01

Prepared for



February 2019



Contents

•	Abbreviations			
1. Introduction	1	2-1		
1.1	Entity that Prepared the ICIAP			
1.2	Name and Location of Site Requiring Institutional Controls			
1.3	Agency Responsible for Institutional Control Oversight			
2. Site Details.		2-1		
2.1	Site Description	2-1		
	2.1.1 Site Identification and Location			
	2.1.2 Site Area and Affected Resources	2-1		
2.2	Site History	2-1		
	2.2.1 Previous Site Uses	2-1		
	2.2.2 Contaminants of Concern	2-1		
	2.2.3 Risk Exposure Pathways	2-2		
	2.2.4 Response Action Summary	2-2		
	2.2.5 Cleanup Objectives	2-3		
	2.2.6 Substantive Use Restrictions Identified in the Decision Document(s)	2-3		
	2.2.7 Current and Reasonably Anticipated Future Land Use			
2.3	Property Information and Stakeholder Contact			
	2.3.1 Parcel Ownership/Occupancy Information			
	2.3.2 Property Interest and Resource Ownership			
	2.3.3 Responsible Parties and Other Stakeholders			
	2.3.4 Tribal, State, and/or Local Government Contacts			
	2.3.5 Other Relevant Stakeholders	2-4		
2.4	Accurate Mapping of Residual Contamination Institutional Control Boundaries, and	2.4		
	Other Site Features			
	2.4.1 Location of Contamination			
	2.4.2 Location of Engineering Controls			
	2.4.4 Location of Restricted Areas			
	ts for All Planned/Implemented Institutional Controls	3-1		
3.1	IC to be Implemented			
3.2	Planned IC General Elements			
	3.2.1 Instrument Name			
	3.2.2 Instrument Type			
	3.2.3 Entity Responsible for Implementation			
	3.2.5 Substantive Use Restriction Achieved by this IC			
	3.2.6 Legal Description of Restricted Area(s)			
	3.2.7 ELUC Lifespan			
	3.2.8 Potential Barriers to IC Implementation			
3.3	Elements Specific to the ELUC			
5.5	3.3.1 Proprietary Controls			
	3.3.2 Government Controls			
	3.3.3 Informational Devices			
3.4	IC Relationship Matrix			
-	r			

4. Institutiona	l Contro	l Maintenance Elements	4-1
4.1	Institu	tional Control Assurance Monitoring	4-1
	4.1.1	Entity Responsible for Institutional Control Monitoring	4-1
	4.1.2	Frequency of Site Inspections and Institutional Control Monitoring	4-1
	4.1.3	Activities that Constitute Monitoring	4-1
	4.1.4	Events and Activities to be Monitored	
4.2	Repor	ting	4-1
	4.2.1	Reporting Procedures and Frequency	
	4.2.2	Events and Activities	4-1
	4.2.3	Location and Procedure for Accessing Records	4-2
	4.2.4	Entity Responsible for Reporting	4-2
	4.2.5	Stakeholder/Regulatory Entity Contact	4-2
5. Institutiona	l Contro	l Enforcement Elements	5-1
5.1	Enforc	ement Entities and Procedures	5-1
	5.1.1	Enforcement Triggering Events	5-1
	5.1.2	Responsible Entity	5-1
	5.1.3	Procedure and Time Frame	5-1
	5.1.4	Enforcing Entity and Notification Procedures	5-1
	The EF	PA and/or IEPA will be the enforcing entity(ies)	5-1
	5.1.5	Legal Authority for Enforcing ICs	
	5.1.6	Contingency Plans	5-1
	5.1.7	Financial Assurances	5-1
6. Institutiona	l Contro	l Modification and Termination Elements	6-1
6.1	Entity	Responsible for Deciding Whether Modification May Occur	6-1
6.2		Responsible for Deciding Whether Termination May Occur	
6.3	Modifi	ication Process	6-1
6.4	Condit	tions for Termination	6-2
7. References			6-1

Appendixes

- A 765 ILCS 122
- B IEPA Model Environmental Land Use Control
- C 2019 Environmental Land Use Control (to be developed)

Tables

- 2-1 Final Cleanup Levels
- 3-1 Summary of Location-Specific and Action-Specific Applicable or Relevant and Appropriate Requirements Associated with Institutional Controls for the Selected Remedy
- 3-2 Institutional Controls Relationship Matrix Institutional Controls Implementation and Assurance Plan

Figures

- 1-1 Site Location Map
- 1-2 Institutional Controls Locations

vi AX1012181719MKE

Acronyms and Abbreviations

BERA Baseline Ecological Risk Assessment

BHHRA Baseline Human Health Risk Assessment

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act of 1980

CH2M CH2M HILL, Inc.

COC contaminant of concern

EC engineering control

ELUC Environmental Land Use Control

EPA U.S. Environmental Protection Agency

FA facility area

FS feasibility study

IC institutional control

ICIAP Institutional Controls and Implementation Plan

IEPA Illinois Environmental Protection Agency

ILCS Illinois Compiled Statues

OAZ Old American Zinc

RA remedial action

RAO remedial action objective

RI remedial investigation

ROD Record of Decision

TCRA time-critical removal action

XTRA XTRA Intermodal, Inc.

AX0222190023MKE vii

1. Introduction

1.1 Entity that Prepared the ICIAP

This draft Institutional Controls Implementation and Assurance Plan (ICIAP) was prepared by CH2M HILL, Inc. (CH2M) on behalf of the U.S. Environmental Protection Agency (EPA), and will be finalized by the entity that will implement the institutional controls (ICs; to be determined) during the remedial action (RA) for the Facility Area (FA) at the Old American Zinc (OAZ) Plant Superfund Site. The draft ICIAP was prepared in accordance with Work Assignment No. 224-RDRD-B5A1 under Contract No. EP-S5-06-01, Land Use in the CERCLA Remedy Selection Process (EPA 1995), Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites (EPA 2010), Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites, OSWER Directive 9200.0-77, EPA-540-R-09-002 (EPA 2012a), and the Illinois 765 Illinois Compiled Statues (ILCS) 122 (Environmental Use Covenants Act).

1.2 Name and Location of Site Requiring Institutional Controls

The OAZ Plant Superfund Site is in the Village of Fairmont City in St. Clair County, Illinois. The entire site includes a 132-acre FA and surrounding properties (Figure 1-1) where elevated metal concentrations associated with the facility operation were found in different media. The FA is bordered by several commercial and industrial properties, including Garcia Trucking to the west, CSX Intermodal railroad yard to the south, and General Chemicals to the east. This ICIAP is for only the FA portion of the Superfund Site and not for the surrounding areas. The FA is currently zoned for commercial or industrial use. Residential cleanup levels will be met across the FA, except as specified in an Environmental Covenant. The Environmental Covenant will be applied to:

- 1. The consolidation area, which will be cleaned up to commercial/industrial standards beneath a 24-inch low-permeability clay barrier, which will function as an engineering control (EC). The consolidation area will have an IC restricting any change of current commercial/industrial zoning or use to residential.
- 2. Several existing buildings and their surrounding pavement areas, which function as existing ECs (Figure 1-2)

The consolidation area is not within the 100-year floodplain. However, areas with existing buildings ECs are currently within the 100-year floodplain. Upon completion of the final grading of the consolidation area, it is expected that the extent of the floodplain will be re-evaluated, to determine whether the existing buildings and pavement areas that will be subject to the Environmental Covenant are within the 100-year floodplain. If so, they may warrant special inspection after flooding events.

1.3 Agency Responsible for Institutional Control Oversight

EPA Region 5 is the lead agency responsible for all environmental response actions undertaken at the FA. The Illinois Environmental Protection Agency (IEPA) is the support agency for FA activities.

AX0222190023MKE 2-1

2. Site Details

2.1 Site Description

2.1.1 Site Identification and Location

The OAZ FA (IL000034355) is in Fairmont City, St. Clair County, Illinois, and is located approximately 9 miles northeast of St. Louis, Missouri. The majority of the FA is located in the southeast quarter of Section 4, Township 2 North Range 9 West. The site address is 575 Kingshighway, Fairmont, Illinois. The site consists of multiple parcels. Parcel identification numbers associated with the site will be confirmed as part of the development of this ICIAP.

2.1.2 Site Area and Affected Resources

The FA is an approximately 132-acre area where former zinc-smelting operations were conducted. Elevated concentrations of metals associated with the historical smelter operations were found in various media in areas surrounding the FA.

The RA consists of excavating slag and source material from the FA and placing excavated material into a newly constructed consolidation area. The consolidation area will also contain contaminated material from surrounding residential, commercial, and vacant properties, village alleyways, and drainageways. The consolidation area will be capped with a cover system consisting of a 24-inch low-permeability clay barrier, overlain by a 12-inch vegetative soil cover. Groundwater at the site and in the vicinity exceeds Illinois Class I groundwater quality standards. It is anticipated that groundwater quality will improve with implementation of the RA. An Environmental Covenant will be placed as an IC on the groundwater, and on areas not meeting unrestricted use (i.e., residential standards).

2.2 Site History

2.2.1 Previous Site Uses

OAZ conducted zinc-smelting operations at the site from 1916 to 1967. Slag from the smelting operation was cooled by placing the molten material along the northern and western boundary of the FA. The slag stockpiles originally encompassed an area of 15 acres. The site, including the clinker and other smelting residues on the property, was purchased by XTRA Intermodal, Inc. (XTRA), in 1979. XTRA operated a trucking terminal at the site until 2003. XTRA ground and redistributed the slag stockpiles on the FA to buildup and level the former plant site to facilitate its trucking operation. At present, redistributed slag on the FA covers an area of 125 acres, with thickness ranging from 6 inches to 9 feet (ENTACT 2012).

2.2.2 Contaminants of Concern

Soil and Sediment

Based on the site investigation and cleanup levels specified in the Record of Decision (ROD), the following are the contaminants of concern (COCs) in soil and sediment at the FA:

ArsenicCadmiumZinc

A summary of prior investigations and related exceedances of the cleanup levels in soil and sediment is presented in the Final RI Report (ENTACT 2009), Feasibility Study (FS) Report (ENTACT 2012), and ROD (EPA 2012b).

AX0222190023MKE 2-1

INSTITUTIONAL CONTROLS IMPLEMENTATION AND ASSURANCE PLAN OLD AMERICAN ZINC PLANT SUPERFUND SITE FAIRMONT CITY, ST. CLAIR COUNTY, ILLINOIS

Groundwater

Based on the site investigation and cleanup levels specified in the ROD, the following are the COCs in groundwater at the FA:

ArsenicZinc

Cadmium
 Manganese

A summary of prior investigations and related exceedances of the cleanup levels in groundwater is presented in the Final RI Report (ENTACT 2009), FS Report (ENTACT 2012), and ROD (EPA 2012b).

2.2.3 Risk Exposure Pathways

As part of the RI/FS, a Baseline Human Health Risk Assessment (BHHRA) and a Baseline Ecological Risk Assessment (BERA) were conducted to determine current and future risks to human health and the environment from site contaminants.

As presented in the BHHRA, arsenic, cadmium, and/or lead were identified as COCs in source materials and affected soils on the FA posing a human health risk to commercial workers, utility/construction workers, or residents under current or hypothetical future scenarios. Lead was the only metal in sediments in Rose Creek and ditches draining the FA posing a potential risk to human health. Arsenic in groundwater below 30 feet was identified in the BHHRA as posing a potential risk under a hypothetical future residential land-use scenario. Under current conditions, there are no human receptors of the shallow groundwater, since there are no potable wells on or downgradient of the FA (ENTACT 2012).

The BERA was limited to an assessment of potential risks to aquatic receptors since the FA is located in a developed area with limited terrestrial habitat. The BERA found that constituents of potential ecological concern at most locations do not appear to pose a potential risk to macroinvertebrates. Any potential adverse effects to the benthic macroinvertebrate community are limited to portions of the waterways on the FA and its immediate vicinity. The BERA reported no conclusive evidence that the health and diversity of the plant community within the Old Cahokia Watershed was being adversely affected by constituents of potential ecological concern associated with historical smelter activities (ENTACT 2012).

Remedial action objectives (RAOs) were created for source materials, affected soil/sediment, and for groundwater both on the FA and surrounding properties. For each media, the RAOs were designed to address potential human health and environmental risks with direct exposure to COCs in media. RAOs are presented in their entirety in Section 2.8 of the ROD (EPA 2012b).

2.2.4 Response Action Summary

EPA, under the provisions of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), conducted a time-critical removal action (TCRA) from 2002 to 2003 at surrounding properties and stockpiled impacted soil at the FA. Additional soil removals were conducted in 2018, with this soil also stockpiled at the FA. Excavated soils from future surrounding property RAs will also be stockpiled and placed within the consolidation area.

A remedial design (CH2M 2019) for the FA was prepared to implement the remedy selected in the ROD, which involves removal of vitrified slag, redistributed ground slag, and affected soils and sediments within the FA, removal of source material (slag used as fill) and placing soils removed within the FA and also removed from the surrounding properties within a 35-acre consolidation area located in the southwest portion of the FA. This ICIAP will be updated after completion of the RA to include a description of the RA, state whether the remedial design was implemented as planned, and to provide details about the consolidation area.

2-2 AX0222190023MKE

2.2.5 Cleanup Objectives

Final cleanup levels are presented in Section 2.12.4 of the ROD (EPA 2012b) and summarized in Table 2-1 of this ICIAP. The commercial/industrial worker soil cleanup levels are applicable beneath the consolidation area, which also has ECs consisting of a clay liner and a low permeability clay barrier. The future use of groundwater as a drinking-water source is highly unlikely. However, Illinois regulations classify the groundwater deeper than 30 feet below ground surface as a potential drinking-water source for the community once safe cleanup levels have been achieved. Therefore, the Class I water quality standards for site COCs were selected as the groundwater cleanup level.

2.2.6 Substantive Use Restrictions Identified in the Decision Document(s)

In accordance with the ROD, ICs/deed restrictions in conjunction with the existing engineering barriers will be established to address the impacted soils remaining at the site following the RA, and to address groundwater. Figure 1-2 shows the locations of the ICs/deed restrictions.

The Environmental Covenant will be executed and ICs put in place in accordance with the Illinois Uniform Environmental Covenants Act (265 ILCS 122) (Appendix A) to achieve the following for the FA: (1) prohibit future residential land use on the 35-acre consolidation area, (2) control access to engineered components of the remedy and prohibit intrusive activities in capped areas to maintain the effectiveness of the cover, and (3) prohibit the installation of potable wells and use of shallow groundwater within the affected groundwater plume until all groundwater cleanup standards have been achieved to ensure long-term protection of human health. The Environmental Covenant will be executed in the form of an Environmental Land Use Control (ELUC), which will be recorded as described in Section 3.

Continued inspection and maintenance are needed to ensure the longevity and integrity of the cover on the consolidation area. These activities will commence immediately following completion of the RA and will include inspecting the cover for damage (punctures, failures, and erosion), inspecting and maintaining erosion control, identifying vegetative stress and correcting as needed, mowing the vegetative cover, and ensuring ICs are in place. Monitoring reports will be prepared annually, and a site performance review will be performed every 5 years. The long-term maintenance plan prepared separately specifies the requirements for the inspection, maintenance, and reporting.

2.2.7 Current and Reasonably Anticipated Future Land Use

The FA will be remediated to unrestricted land use (i.e., residential cleanup levels), except the consolidation area and areas covered by existing environmental controls. ICs are needed to supplement the protectiveness of the remedy by preventing future potential disturbances of the consolidation area and existing building and pavement areas, as shown in Figure 1-2. The groundwater is not currently used as a drinking water supply, but the anticipated future is potentially as Class I groundwater.

2.3 Property Information and Stakeholder Contact

2.3.1 Parcel Ownership/Occupancy Information

XTRA leased the FA property from American Zinc (now Blue Tee Corporation or Blue Tee) between 1976 and 1979 and purchased the property in 1979, including the clinker and other smelter residues, minerals, or metals located on the property. From 1976 to sometime after 2003, XTRA operated a transport-trucking terminal on the FA, which included the lease, storage, and maintenance of a diverse fleet of over-the-road trailers, intermodal ("piggyback") trailers, and intermodal equipment. Beginning in 1976, XTRA ground and redistributed the stockpiled slag across the FA to build up and level the FA for its trucking operations. Placement of the ICs will require the consent of XTRA and the other landholders

AX0222190023MKE 2-3

within the areas of the FA that will not meet residential soil cleanup levels, before the use restrictions can be placed on the properties. If XTRA and the other landholders are in agreement with the ICs, the use restrictions will be recorded with the St. Clair County Registrar of Deeds with the land titles to ensure that current and future land or shallow groundwater use remains restricted even if the parcels change ownership.

2.3.2 Property Interest and Resource Ownership

Recorded real property interests and resource interests, and relevant parties therefrom, will be identified through a title commitment and lien search for each parcel associated with the FA throughout the RA process, as applicable.

2.3.3 Responsible Parties and Other Stakeholders

This section will be updated during finalization of the ICIAP, and will include, when the RA is complete: property owners who own land to which the IC applies, the entity responsible for implementing long term maintenance, and the entity responsible for enforcing the ELUC.

2.3.4 Tribal, State, and/or Local Government Contacts

The nearby Cahokia Mounds is a National Historic Landmark, which is significant for archeological deposits. Any impacts from implementation of the RA will be addressed during the RA. This section will be updated during finalization of the ICIAP to include relevant tribal, state, or local government contacts.

2.3.5 Other Relevant Stakeholders

This section will be updated during finalization of the ICIAP.

2.4 Accurate Mapping of Residual Contamination Institutional Control Boundaries, and Other Site Features

2.4.1 Location of Contamination

The location of contamination to be excavated and placed within the consolidation area is presented in the Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design A (CH2M 2019). The final extent of impacts will be determined based on confirmation sampling completed during the RA and summarized in the Work Completion Report. Upon completion, a final survey will be performed to document the extent of the boundaries that are subject to the individual IC conditions.

2.4.2 Location of Impacted Parcels

The location of impacted parcels is presented in the *Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design* (CH2M 2019) and is shown in Figure 1-2.

2.4.3 Location of Engineering Controls

Engineering barriers, including concrete slabs within buildings and surrounding pavement in some areas, will remain in place to eliminate potential direct-contact exposure to COCs that may be present below the building floor slab. Concrete building slabs and surrounding pavement considered as ECs s are

2-4 AX0222190023MKE

presented in Figure 1-2 and include several buildings. Concrete, pavement, and soil in these areas cannot be disturbed or removed without prior written approval of the entity responsible for enforcing the ELUC, or after to ensure that soils exceeding cleanup levels that were under the EC are either relocated or disposed of in accordance with the ROD.

The consolidation area includes an EC that is a cover meeting the requirements of 35 Illinois Administrative Code Part 807.305(c).

Any disturbance of any EC must be conducted in accordance with the ELUC, which will be prepared after completion of the RA.

2.4.4 Location of Restricted Areas

The areas as shown in Figure 1-2 compose the restricted areas as understood at the time of this draft ICIAP. The ELUC that will be prepared after the RA is complete will include a survey with the legal boundaries of the restricted areas addressed by the ELUC. The entire FA as shown in Figure 1-1 is a restricted area for groundwater.

AX0222190023MKE 2-5

3. Key Elements for All Planned/Implemented Institutional Controls

3.1 IC to be Implemented

The Environmental Covenant meeting the requirements of the Illinois Uniform Environmental Covenants Act will take the form of an ELUC for the FA. The ELUC will contain the contents described in 765 ILCS 122/4 and will be recorded in St. Clair County. The ELUC may be amended or terminated only if compliant with 765 ILCS 122/10. Appendix A contains a copy of 765 ILCS 122, and Appendix B contains a model ELUC.

3.2 Planned IC General Elements

Table 3-1 references the Applicable or Relevant and Appropriate Requirements that the planned IC is associated with and the RAOs that the planned IC is achieving.

3.2.1 Instrument Name

An ELUC is anticipated to be developed and recorded. No other ICs are anticipated at this time.

3.2.2 Instrument Type

The ELUC will be recorded with the deed(s) for the indicated portion of the FA.

3.2.3 Entity Responsible for Implementation

The entity implementing the ICs will be responsible for developing, recording, and implementing the ELUC; however, the current site owners at the time will be required to approve and sign the ELUC. The Long-Term Maintenance Plan will be implemented by the entity determined to be responsible after the RA, when the ELUC is prepared. The draft Long-Term Maintenance Plan has been prepared separately and is included in the *Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design* (CH2M 2019).

3.2.4 Implementation Event and Date

The ICs will be implemented within 90 days of completion and approval of the Record Documents to be prepared by the construction contractor per the specifications in the *Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design* (CH2M 2019). The executed ICs will be provided to the entity responsible for enforcing the ELUC within 30 days after recording with the St. Clair County Clerk.

3.2.5 Substantive Use Restriction Achieved by this IC

Substantive use restrictions include, but are not limited to, the following:

- Zoning and/or land use restrictions onsite consistent with future anticipated land use, including:
 - The requirement that certain existing building foundations/slabs remain in place as a barrier to contamination beneath them, unless approved by the entity responsible for enforcing the ELUC

AX0222190023MKE 3-1

- Implementation of an ELUC, which would include:
 - Prohibition of disturbance and/or removal of specified existing building foundations/slabs and surrounding pavement without prior written approval of the entity responsible for enforcing the ELUC.
 - Prohibition of digging in ELUC areas without proper training and protective measures.
 - Management by the owner of all soils, media and/or debris located within the portions of the Property designated in the ELUC as in accordance with all applicable federal, state, and local requirements.
 - Installation of permanent markers on the property identifying depth to which digging is prohibited and enrollment of property in state-wide utility location program to identify areas where digging is prohibited.
 - Prohibition of rezoning any of the IC areas within the FA to residential unless additional RA has been taken.

3.2.6 Legal Description of Restricted Area(s)

The legal description of restricted areas will be prepared in the final ELUC.

3.2.7 ELUC Lifespan

The ICs are anticipated to be maintained in perpetuity unless additional activities beyond those identified in the ROD are undertaken to cleanup existing contamination to levels below the cleanup levels specified in the ROD. The anticipated ICs are based on anticipated future land use.

3.2.8 Potential Barriers to IC Implementation

Concurrence by all stakeholders involved (i.e., EPA, IEPA, property owners of restricted areas) must be achieved to implement the IC(s).

3.3 Elements Specific to the ELUC

The selected remedy requires that ICs be put into place to ensure that the remedy will remain protective of human health and the environment in light of current use and anticipated future redevelopment of the site. ICs are non-engineered instruments, such as administrative and/or legal controls, to help to minimize the potential for human exposure to contamination and/or protect the integrity of a remedy. Generally, there are four types of ICs: (1) proprietary controls, such as easements or covenants; (2) governmental controls, such as building codes or groundwater use regulations; (3) enforcement and permit tools, such as orders, permits, or consent decrees; and (4) informational devices, such as deed notices and advisories.

3.3.1 Proprietary Controls

An ELUC will be developed to: (1) provide a permanent right of access over the site to EPA, IEPA, and property owners for the purpose of conducting any future activity on the FA, and (2) limit the use of the site to prevent interference with, or adverse effect on, the integrity or protectiveness of the remedy.

3-2 AX0222190023MKE

The ELUC generally will include, but not be limited to, the elements described in Section 3.2.5, along with the following:

- The construction and use of wells or other devices on the site to extract groundwater for consumption, irrigation, or any other purpose is prohibited, except as follows:
 - Wells and other devices constructed as part of a response activity for the purpose of evaluating groundwater quality or to remediate subsurface contamination associated with a release of hazardous substances into the environment are permitted provided the construction of the wells or devices complies with all applicable local, state, and federal laws and regulations and does not cause or result in a new release, exacerbation of existing contamination, or any other violation of local, state, or federal laws or regulations.
 - Short-term dewatering for construction purposes is permitted provided the dewatering, including management and disposal of the groundwater, is conducted in accordance with all applicable local, state, and federal laws and regulations, and does not cause or result in a new release, exacerbation of existing contamination, or any other violation of local, state, and federal environmental laws and regulations.
- The property owners shall provide notice to EPA and IEPA of their intent to convey any interest in the
 site 14 days prior to consummating the conveyance for areas subject to the ELUC. A conveyance of
 title, an easement, or other interest in the property shall not be consummated by the property owner
 without adequate and complete provisions for compliance with the terms and conditions of the ELUC.
- The property owners shall grant to EPA and IEPA and its designated representatives the right to
 enter the site at reasonable times to determine and monitor compliance with the ROD, including the
 right to take samples, inspect the operation of the RA measures, and inspect records.
- The ELUC shall run with the property and shall be binding upon the owners; all future owners; and their successors and assigns, lessees, easement holders, and any authorized agents, employees, or persons acting under their direction and control. The ELUC shall continue until EPA and IEPA or their successor(s) approve modification or rescission of the ELUC. The ELUC may only be modified or rescinded with the written approval of EPA and IEPA or their successor(s). A copy of the ELUC shall be provided to all future owners, heirs, successors, lessees, assigns, and transferees by the person transferring the interest.
- The property owners shall manage all soils, media and/or debris located within the ELUC areas in accordance with the applicable requirements of federal, state, and local requirements.
- The property owners shall prohibit activities on the site that may interfere with any element of the RA, including the performance of operation and maintenance activities, monitoring, or other measures necessary to ensure the effectiveness and integrity of the RA implemented at the site.

The draft ELUC will be developed with the current property owners and provided as Appendix C. It will be based on the IEPA Model ELUC in Appendix B. The draft ELUC(s) will be subject to change based on potential property transfers prior to the completion to the RA and/or final verification sampling results.

Proof of title of the grantor/covenanter and appropriate signatory as the property owner will be included in the final ELUC, as the ELUC will be attached to such title, consistent with the IEPA Model ELUC; however, is subject to change based on potential property transfers prior to the completion to the RA and/or final verification sampling results.

3.3.2 Government Controls

The Illinois water well construction code is set forth in 415 ILCS 30/1 from Ch. 111 1/2, par. 116.111) and associated promulgated regulations at 77 Ill. Adm. Code Part 920 Illinois Water Well Construction Code.

AX0222190023MKE 3-3

INSTITUTIONAL CONTROLS IMPLEMENTATION AND ASSURANCE PLAN OLD AMERICAN ZINC PLANT SUPERFUND SITE FAIRMONT CITY, ST. CLAIR COUNTY, ILLINOIS

The code contains minimum specifications for the location and construction of water wells and associated pumping equipment and includes various prohibitions. The local government department with authority and responsibility for the control is:

Illinois Department of Public Health 535 West Jefferson Street Springfield, Illinois 62761 Phone 217-782-4977 DPH.MAILUS@illinois.gov

Although Fairmont City, and specifically the site and surrounding area, are serviced by a public water supply system, the City and St. Clair County ordinances prohibiting the installation of water supply wells for potable or not-potable groundwater use have been enacted.

The statute regulating prevention of underground utilities from damage is 220 ILCS 50 of the Illinois General Assembly. The statute creates the State-Wide One-Call Notice System, commonly referred to as JULIE, Inc., and requires that owners and operators of underground utilities enroll in JULIE, which is used to identify areas where digging is prohibited.

The Site Owner will comply with the IC, which can be enforced per the Illinois Environmental Use Covenants Act.

3.3.3 Informational Devices

Registries are maintained by both the EPA and IEPA regarding engineering and/or ICs. Federal registries/databases include the Engineering Controls Sites List (US Eng Controls) and Institutional Controls Sites List (US Inst Controls). Deed restrictions are generally required as part of the ICs. These databases are maintained by EPA and are updated on a varying basis. At the time of preparation of the ELUC, the department within IEPA responsible for managing the state registry/database for St. Clair County will be identified, for inclusion of the site in the state registry.

The extent of the consolidation area is anticipated to be apparent, as vegetation will be established on the cap. However, over time, it may be more difficult to distinguish the limits of the cap. Therefore, permanent markers will be established to demark the cap. In areas of ECs, markers will be established to identify the depth to which digging is prohibited and the ELUC areas will be enrolled in JULIE to identify where digging is prohibited. Individuals anticipated to perform subsurface activities in ELUC areas at the site will be provided with a copy of the applicable ELUC constraints.

These informational devices will provide notification for a variety of entities, including but not limited to, utility workers, future workers, and current and prospective property owners. Potential issues could include disregard for digging prohibition, or lack of recent update to the registries if used on their own and not in conjunction with other data sources (i.e., lien search or title work).

3.4 IC Relationship Matrix

Table 3-2 contains the IC relationship matrix.

3-4 AX0222190023MKE

4. Institutional Control Maintenance Elements

4.1 Institutional Control Assurance Monitoring

IC assurance monitoring will be completed to ensure the long-term effectiveness of the instrument in preventing unacceptable exposure or protecting the integrity of the RA.

4.1.1 Entity Responsible for Institutional Control Monitoring

This will be determined during finalization of this ICIAP.

4.1.2 Frequency of Site Inspections and Institutional Control Monitoring

The frequency and nature of Site inspections and IC monitoring related to the effectiveness of the ECs and IC will be outlined in the final Long-Term Maintenance Plan, which will be finalized after completion of the RA. CH2M prepared a draft version of this plan, which is included as an appendix to the Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design (CH2M 2019).

4.1.3 Activities that Constitute Monitoring

The activities that are associated with the IC monitoring related to the effectiveness of the EC and IC will be outlined in the final Long-Term Maintenance Plan, which will be finalized after completion of the RA. CH2M prepared a draft version of this plan, which is included as an appendix to the Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design (CH2M 2019).

4.1.4 Events and Activities to be Monitored

The events and activities that are associated with the IC monitoring related to the effectiveness of the EC and IC will be outlined in the final Long-Term Maintenance Plan, which will be finalized after completion of the RA. CH2M prepared a draft version of this plan, which is included as an appendix to the Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design (CH2M 2019).

4.2 Reporting

4.2.1 Reporting Procedures and Frequency

A summary of the results of the long term maintenance activities related to the ICs/ECs will be prepared by the entity implementing the ICs annually. The reports will be submitted to the Entity responsible for implementing the ELUC.

4.2.2 Fyents and Activities

Items to be included in the annual report include, but are not limited to, the following:

- Current, proposed, or anticipated changes in land use or zoning
- Current, proposed, or anticipated property transfer(s)

AX0222190023MKE 4-1

- Observed or documented breaches to the implemented ICs, including cap inspection reports
- Annual review of proprietary controls through title review to confirm the controls have not been modified or terminated

4.2.3 Location and Procedure for Accessing Records

The Administrative Record file is available for review at the EPA Region 5 Records Center, 77 West Jackson Boulevard, Chicago, Illinois, and at the following designated information repositories:

Fairmont City Village Hall 2601 N. 41st St.

Fairmont City Library Center 2870 N. 44th St.

4.2.4 Entity Responsible for Reporting

The entity responsible for IC monitoring reporting will be determined during the RA.

4.2.5 Stakeholder/Regulatory Entity Contact

Contacts will be added during finalization of the ICIAP.

4-2 AX0222190023MKE

5. Institutional Control Enforcement Elements

5.1 Enforcement Entities and Procedures

The purpose of the enforcement entities and procedures is to address deficiencies associated with the following: (1) improper or incomplete IC implementation; (2) improper or incomplete IC maintenance; (3) reported IC breach/violation.

5.1.1 Enforcement Triggering Events

Events that would trigger enforcement include, but are not limited to, the following:

- Improper or incomplete IC implementation (i.e., not defining ELUC areas correctly)
- Improper or incomplete IC maintenance (i.e., not conducting inspections or reporting)
- Reported IC breach/violation (i.e., use of the property inconsistent with the recorded instrument)

5.1.2 Responsible Entity

The responsible entities for rectifying the enforcement triggering events could include, but are not limited to, the following:

- Property Owners
- Property Interest Holders

The responsible entities will vary based on the nature of the violation.

5.1.3 Procedure and Time Frame

Procedures and time frames for rectifying IC breaches/violations will be developed as part of the RA in conjunction with the development of the draft ICs.

5.1.4 Enforcing Entity and Notification Procedures

The EPA and/or IEPA will be the enforcing entity(ies).

5.1.5 Legal Authority for Enforcing ICs

The EPA and/or State of Illinois, through the IEPA, will be the enforcing entity(ies) under CERCLA and the Illinois Uniform Environmental Covenants Act.

5.1.6 Contingency Plans

The contingency plans for the anticipated IC will be developed as part of the RA in conjunction with the development of the draft ICs.

5.1.7 Financial Assurances

Final assurances will be determined during finalization of the ICIAP.

AX0222190023MKE 5-1

6. Institutional Control Modification and Termination Elements

6.1 Entity Responsible for Deciding Whether Modification May Occur

The IC may only be modified or rescinded with the written approval of EPA and IEPA or their successor(s).

6.2 Entity Responsible for Deciding Whether Termination May Occur

The IC may only be terminated with the written approval of EPA and IEPA or their successor(s).

6.3 Modification Process

The ELUC shall run with the property and shall be binding upon the property owners, all future owners, and their successors and assigns, lessees, easement holders, and any authorized agents, employees, or persons acting under their direction and control. The ELUC shall continue until EPA and IEPA or their successor(s) approve modification or rescission of the ELUC. The ELUC may only be modified or rescinded with the written approval of EPA and IEPA or their successor(s) as outlined below. A copy of the ELUC shall be provided to all future owners, heirs, successors, lessees, assigns, and transferees by the person transferring the interest.

The ELUC shall continue for as long as necessary to accomplish the RA described in the ROD, and shall not be modified, suspended, terminated, or revoked without express written authorization by EPA, with the approval of IEPA. The current or any subsequent property owners of the Site may seek to modify or terminate, in whole or in part, the restrictions set forth in the ELUC by submitting to EPA a written application that identified each such restriction to be terminated or modified, describes that terms of each proposed modification, and sets out any proposed revisions to the environmental easement/restrictive covenants in the ELUC. Each application for termination or modification of any restriction or easement set forth in the ELUC shall include a demonstration by the applicant that the requested termination or modification will not interfere with, impair, or reduce:

- The effectiveness of any measures undertaken pursuant to the ROD
- The long-term protectiveness of the RA
- The protection of human health and the environment

If EPA makes a determination that an application satisfies the requirements of the above, EPA will notify the owner of the site in writing. If EPA does not respond in writing within 90 days to the application to modify or terminate any restrictions, EPA shall be deemed to have denied the owner's application. Any modification to or rescission of the ELUC shall be filed with the St. Clair County Register of Deeds and a certified copy shall be returned to the entity responsible for enforcing the ELUC.

AX0222190023MKE 6-1

6.4 Conditions for Termination

The IC(s) are anticipated to be maintained in perpetuity unless additional activities beyond those identified in the ROD are undertaken to address concentrations of contamination that exceed cleanup levels.

ECs can be removed only with prior written approval of the entity responsible for enforcing the ELUC Termination Process.

The ELUC shall continue until the entity responsible for enforcing the ELUC approve rescission or termination of the ELUC. The ELUC may only be rescinded or terminated with the written approval of the entity responsible for enforcing the ELUC as described in Section 6.3.



7. References

ENTACT. 2009. Final Remedial Investigation Report, Old American Zinc Plant Site, Fairmont City, Illinois. March.

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CH2M HILL, Inc. (CH2M). 2019. Final Basis of Design Report, Revision 1, Old American Zinc Plant Superfund Site, Fairmont City, St. Clair County, Illinois, Facility Area Remedial Design. February.

Illinois Joint Committee on Administrative Rule. Illinois Administrative Code Title 35: Environmental Protection.

- U.S. Environmental Protection Agency (EPA). 2010. *Institutional Controls: A Guide to Planning, Implementing, Maintaining, and Enforcing Institutional Controls at Contaminated Sites,* Publication Office of Solid Waste and Emergency Response (OSWER) Directive 93550-89. November.
- U.S. Environmental Protection Agency (EPA). 2012. *Institutional Controls: A Guide to Preparing Institutional Controls Implementation and Assurance Plans at Contaminated Sites*, OSWER Directive 9200.0-77, EPA-540-R-09-002. December.
- U.S. Environmental Protection Agency (EPA). 2012. *Record of Decision, Old American Zinc Plant Superfund Site*. September.
- U.S. Environmental Protection Agency (EPA). 1995. *Remedial Design/Remedial Action Handbook*. Office of Emergency and Remedial Response. Publication 540/R-95/059. June.
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AX0222190023MKE 6-1

Tables

Table 1-1. Final Cleanup Levels

Old American Zinc Superfund Site Facility Area

		Groundwater		
Contaminant of Concern	Residential (mg/kg)	Non-Residential (mg/kg)	Commercial/Industrial Worker (mg/kg)	MCL/Illinois Class I (mg/L)
Arsenic	32	239	239	0.01
Cadmium	37	809	135	0.005
Lead	400	826	826	5
Zinc	6,400	31,852°/306,600b	51,100	0.15

^aBased on ecological risk for sediment

^bBased on human health risk for soil/sediment

mg/kg = milligrams per kilogram

Table 3-1. Summary of Location-Specific and Action-Specific Applicable or Relevant and Appropriate Requirements Associated with Institutional Controls for the Selected Remedy

Old American Zinc Plant Superfund Site Facility Area

Requirement	Use Restriction/IC Objective	Comment
Location-specific ARARs		
Executive Order on Floodplain Management (Executive Order No. 11988, 40 <i>Code of Federal Regulations</i> Part 6.302(b) and Appendix A	Minimize effects of actions to reduce the risk of flood loss; to minimize the impact of floods on human safety, health, and welfare; and to restore and preserve the natural and beneficial values served by floodplains.	Several of the smaller EC areas are located within the 100-year floodplain. The consolidation area and has been located outside of the 100-year floodplain.
State Certifications and NPDES (40 Code of Federal Regulations Part 122.26(a)(14)	Requires the development and implementation of a water pollution prevention plan or a stormwater best management plan. Also outlines monitoring and inspection requirements for a variety of activities. Illinois Environmental Protection Agency implements the NPDES program and the associated stormwater management requirements.	Post-construction stormwater management is appropriate for the EC areas. Stormwater management during construction could be appropriate during future disturbance of ELUC areas.
Illinois Water Quality Standards (35 IAC, Subtitle C, Chapter 1, Sections 302.208 and 302.210)	Establishes numerical standards and procedures for deriving criteria for toxic substances without numerical standards to restore, maintain, and enhance purity of the water of the state.	Post-construction stormwater from the consolidation area that is discharged to surface water through point sources, and construction stormwater from future disturbance of ELUC areas, must meet the standards in 35 IAC Sections 302.208 and 302.210.
Illinois Standards for New Solid Waste Landfills (IAC Title 35, Part 807.305(c) Cover)	Cover requirements include "Final Cover – a compacted layer of not less than 2 feet of suitable material."	The specified cover is a 24-inch compacted low-permeability clay barrier, overlain by a 12-inch vegetative soil cover.
IAC Title 35, Part 808 Illinois Special Waste Regulations	Generators are required to classify the waste, manifest the waste, use permitted transporters, and dispose of the waste at a permitted facility.	Liquids such as decontamination water and wheel wash water, if generated by future disturbance of ELUC areas would be considered pollution control waste, if disposed offsite. Compliance should be incorporated in the Soil Management Plan.
Fugitive Particulate Matter (IAC Title 35, Part 212, Subpart K)	Establishes requirements for dust control in Sections 212.301, 212.315, and 212.316.	Fugitive particulate matter, could be generated by future disturbance of ELUC areas. Compliance should be incorporated in the Soil Management Plan.
Illinois Clean Fill Regulations (IAC Title 35, Part 1100)	State regulations governing clean fill operations.	Imported fill could be used as part of future disturbance of ELUC areas. Compliance should be incorporated in the Soil Management Plan.

Table 3.1. Summary of Location-Specific and Action-Specific Applicable or Relevant and Appropriate Requirements Associated with Institutional Controls for the Selected Remedy

Old American Zinc Plant Superfund Site Facility Area

Requirement	Use Restriction/IC Objective	Comment	
Illinois Uniform Environmental Covenants Act (765 Illinois Compiled Statutes 122)	The is to ensure that land use restrictions and engineering controls designed to control the potential environmental risk of residual contamination will be recorded in the land records and enforced over time, perpetually if necessary, while allowing that real estate to be conveyed from one person to another subject to those controls.	There will be locations where cleanup does not achieve unrestricted use standards, therefore an Environmental Covenant will be established to describe and implement land use restrictions and engineering controls forced over time.	
Noise (IAC Title 35, Subtitle H: Part 900.102- 106)	Regulations contain specific requirements that pertain to nuisance noise levels, sound emission standards, and limitations.	Noise could be generated by future disturbance of ELUC areas. Compliance should be incorporated in the Soil Management Plan.	
Guidance for NPDES Construction Site Stormwater Discharges in the State of Illinois	Guidance related to implementation of the federal Clean Water Act General Construction Permit program in Illinois.	Construction could occur as part of future disturbance of the ELUC areas. Compliance should be incorporated in the Soil Management Plan.	

Notes:

RAOs are presented in Section 2.8 of the ROD.

ARAR = Applicable or Relevant and Appropriate Requirements

EC = engineering control

ELUC = Environmental Land Use Control

IAC = Illinois Administrative Code

NPDES = National Pollutant Discharge Elimination System

Table 3-2. Institutional Controls Relationship Matrix Institutional Controls Implementation and Assurance Plan Old American Zinc Superfund Site Facility Area

Redevelopment Area	Contaminants Remaining (1)	Contaminated Media	Proposed Engineering Controls (2)	Cleanup Objective	Use Restriction/IC Objective	Conditions for Termination	IC Instruments (Planned or Implemented)
Entire site	Arsenic, Cadmium, Zinc, Manganese	Groundwater	None	 Prevent further migration of the shallow groundwater contamination. Prevent the ingestion of shallow affected groundwater that could pose an unacceptable risk to human health. 	The construction and use of wells or other devices on the Site to extract groundwater for consumption, irrigation, or any other purpose is prohibited, except: wells and other devices constructed as part of a response activity or to remediate subsurface contamination and short-term dewatering for construction purposes, both of which must be conducted in accordance with all applicable local, state, and federal laws and regulations.	IC required in perpetuity unless groundwater monitoring shows that concentrations of metals in the groundwater meet the Illinois Class 1 water quality standards. Note that groundwater chemical-specific ARARs are not met upgradient from the site.	Deed Restriction (Planned)
Smaller ELUC areas with buildings and concrete or paved surfaces	Arsenic, Cadmium, Lead, Zinc	Soil/Sediment	Existing buildings and, in some areas, surrounding concrete or asphalt	 Prevent direct human contact with, or ingestion and inhalation of, COCs in affected soils/sediment that could result in an unacceptable human health risk as determined in the BHHRA. Minimize the transport of COCs in affected soils/sediments via the physical redistribution of slag, stormwater run-off over exposed slag to drainage ditches and creeks that drain the Facility Area, and lateral migration in shallow groundwater that could result in additional affected media or recontamination of remediated areas. Minimize the potential of exposure by construction workers conducting intrusive activities to the discarded tarry material found with buried demolition debris that could result in an unacceptable human health risk as determined in the BHHRA. Prevent direct contact with, or ingestion or inhalation of, COCs in affected soils by potential future commercial/industrial receptors that could result in an unacceptable human health risk as determined in the BHHRA. Remediate the Site to where it is no longer contributing to groundwater contamination. 		IC required in perpetuity unless additional future development or additional remedial action taken to address metals in these areas that exceed cleanup levels.	Deed Restriction (Planned)
Consolidation area	Arsenic, Cadmium, Lead, Zinc,	Soil/Sediment	35 IAC 807.305(c) landfill cap	 Prevent direct human contact with, or ingestion and inhalation of, COCs in affected soils/sediment that could result in an unacceptable human health risk as determined in the BHHRA. Minimize the potential of exposure by construction workers conducting intrusive activities to the discarded tarry material found with buried demolition debris that could result in an unacceptable human health risk as determined in the BHHRA. Prevent direct contact with, or ingestion or inhalation of, COCs in affected soils by potential future commercial/industrial receptors that could result in an unacceptable human health risk as determined in the BHHRA. Remediate the site to where it is no longer contributing to groundwater contamination. 		IC required in perpetuity unless additional remedial action taken to remove the materials within the consolidation area.	Deed Restriction (Planned)

Table 3-2. Institutional Controls Relationship Matrix Institutional Controls Implementation and Assurance Plan

Old American Zinc Superfund Site Facility Area

Redevelopment Area	Contaminants Remaining ⁽¹⁾	Contaminated Media	Proposed Engineering Controls (2)	Cleanup Objective	Use Restriction/IC Objective	Conditions for Termination	IC Instruments (Planned or Implemented)
Consolidation area	Arsenic, Cadmium, Lead, Zinc,	Source Material (Slag and Tarry material)	35 IAC 807.305(c) landfill cap	 Prevent direct contact with, or ingestion and inhalation of, COCs in source materials that could result in unacceptable human health risks as defined in the BHHRA. 		IC required in perpetuity unless additional remedial action taken to remove the materials within the consolidation area.	Deed Restriction (Planned)
				 Minimize the transport of COCs from source materials via the physical redistribution of slag, stormwater run-off over exposed slag to drainage ditches and creeks that drain the Facility Area, and lateral migration in shallow groundwater that could result in additional affected media or recontamination of remediated areas. 			
				 Remediate the site to where source materials are no longer contributing to groundwater contamination. 			
				 Eliminate the discharge of stormwater containing metals at concentrations exceeding the Illinois Water Quality Standards from the Facility Area to the manmade ditches and Rose Creek. 			
				 Eliminate the transport of COPECs from surficial source material deposits to the inundated wetland or perennial open water area of the Old Cahokia Creek Watershed. 			

Notes:

The remedy includes excavation and consolidation to meet Residential Cleanup Criteria or Commercial/Industrial criteria for site COCs, as described in the Record of Decision and BHHRA.

(1) Contaminants remaining includes those site COCs that remain above Non-Residential Cleanup Criteria for soil/sediment/slag and beyond Illinois Class I Groundwater Quality Standards for groundwater.

(2) Figure 2-2 presents areas where engineering controls (i.e., engineered cap, building slab, and/or required depth of soil cover) are currently or are planned to be in place before redevelopment of the site to address impacts above Record of Decision cleanup levels.

ARAR = Applicable or Relevant and Appropriate Requirements

BHHRA = Baseline Human Health Risk Assessment

COC = contaminant of concern

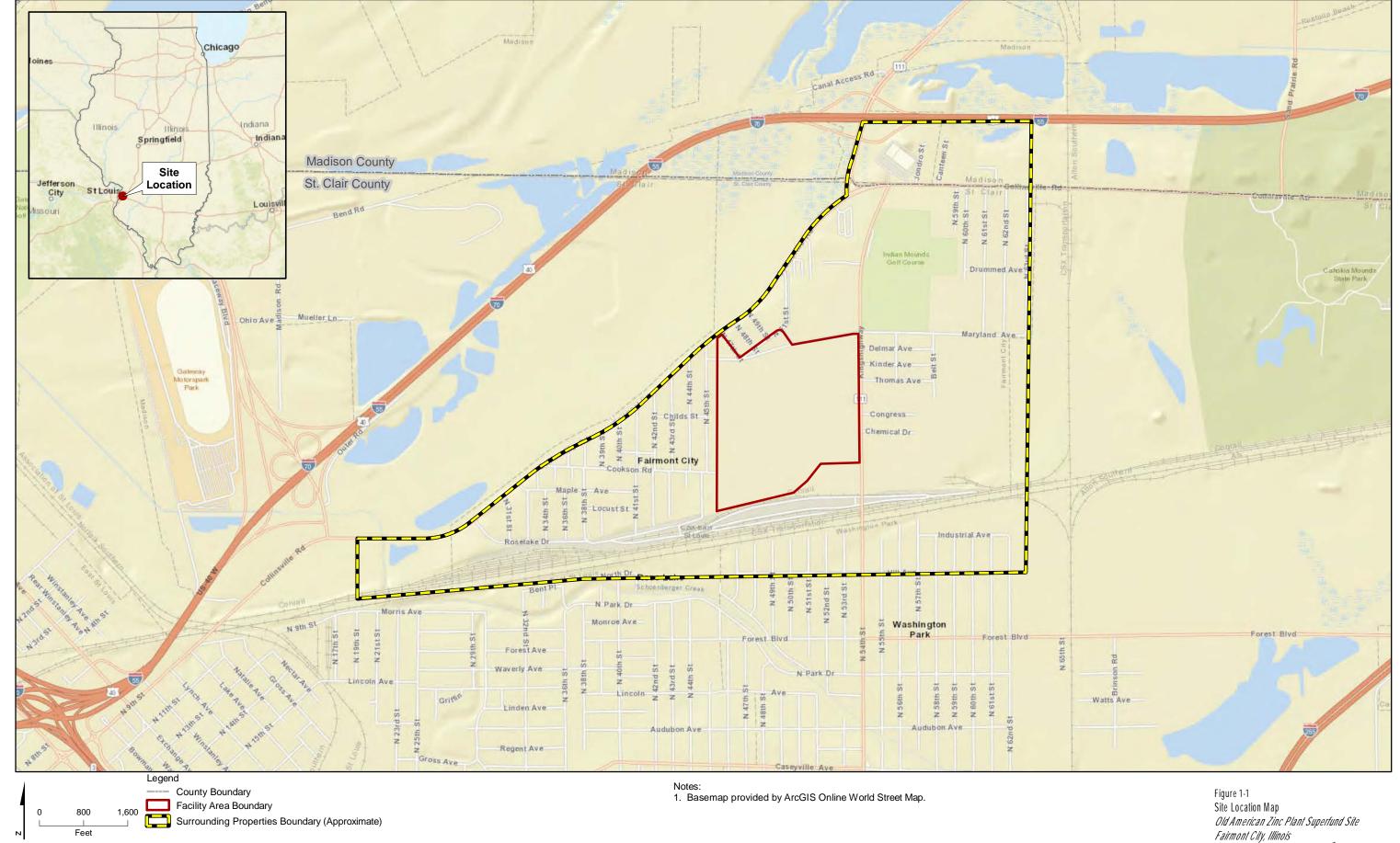
COPEC = contaminant of potential concern

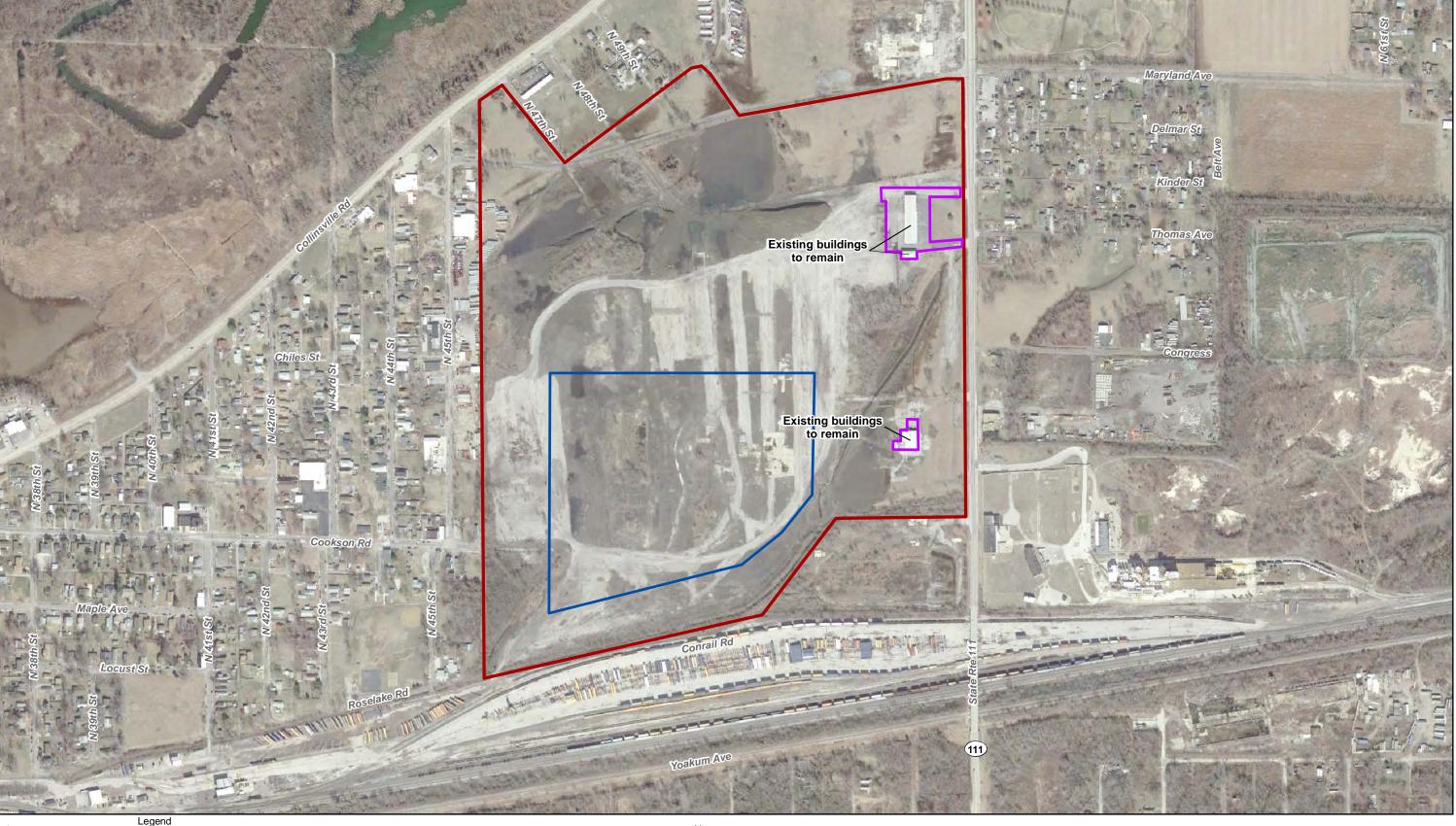
ELUC = Environmental Land Use Control

IAC = Illinois Administrative Code

IC = institutional control

Figures





Institutional control-Restricted to non-residential land use control Institutional control-Engineering control to remain in place Facility Area Boundary

Notes:
1. Google Earth Imagery Date: February 24, 2018.

Figure 1-2 Institutional Controls *Old American Zinc Plant Superfund Site Fairmont City, Illinois* -ch2/m:

Appendix A 765 ILCS 122 Home Legislation & Laws Senate House My Legislation Site Map

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Compiled Statutes

Public Acts

Legislative Reports

IL Constitution

Legislative Guide

Legislative Glossary

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Back to Act Listing Public Acts Search Guide Disclaimer Printer-Friendly Version

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Because the statute database is maintained primarily for legislative drafting purposes, statutory changes are sometimes included in the statute database before they take effect. If the source note at the end of a Section of the statutes includes a Public Act that has not yet taken effect, the version of the law that is currently in effect may have already been removed from the database and you should refer to that Public Act to see the changes made to the current law.

PROPERTY (765 ILCS 122/) Uniform Environmental Covenants Act.

(765 ILCS 122/1)

Sec. 1. Short title. This Act may be cited as the Uniform Environmental Covenants Act. (Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/2)

Sec. 2. Definitions. In this Act:

"Activity and use limitations" means restrictions or obligations created under this Act with respect to real property.

"Agency" means the Illinois Environmental Protection Agency or any other State or federal agency that determines or approves the environmental response project pursuant to which the environmental covenant is created.

"Board" means the Pollution Control Board established by the Environmental Protection Act.

"Common interest community" means a condominium, cooperative, or other real property with respect to which a person, by virtue of the person's ownership of a parcel of real property, is obligated to pay property taxes or insurance premiums, or for maintenance, or improvement of other real property described in a recorded covenant that creates the common interest community.

"Environmental covenant" means a servitude that (i) arises under an environmental response project or under a court or Board order and (ii) imposes activity and use limitations.

"Environmental response project" means a plan or work that is:

- (1) approved or overseen by an agency; and
- (2) performed for environmental remediation of any site or facility in response to contamination at any one or more of the following sites or facilities:
 - (A) sites or facilities that are listed as proposed or final on the National Priorities List pursuant to Section 105 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. 9601 et seq.);
 - (B) sites or facilities undergoing remediation pursuant to an administrative order issued pursuant to Section 106 of the Comprehensive Environmental

Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. 9601 et seq.);

- (C) sites or facilities that are or were formerly owned or operated by a department, agency, or instrumentality of the United States that are undergoing remediation pursuant to Section 120 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. 9601 et seg.):
- (D) sites or facilities undergoing remediation pursuant to a settlement agreement pursuant to Section 122 of the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended (42 U.S.C. 9601 et seq.);
- (E) sites or facilities undergoing remediation pursuant to Section 3008(h) of the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 et seq.);
- (F) sites or facilities undergoing remediation pursuant to Section 7003 of the Resource Conservation and Recovery Act of 1976 (42 U.S.C. 6901 et seq.);
- (G) sites or facilities undergoing remediation pursuant to a court or Board order issued pursuant to the Illinois Environmental Protection Act (415 ILCS 5/1 et seq.) with the approval of the Agency; or
- (H) sites or facilities undergoing remediation pursuant to a Compliance Commitment Agreement entered into under Section 31 of the Environmental Protection Act.

"Holder" means the grantee of an environmental covenant as specified in Section $3\,(a)\,.$

"Person" means an individual, corporation, business trust, estate, trust, partnership, limited liability company, association, joint venture, public corporation, government, governmental subdivision, agency, or instrumentality, or any other legal or commercial entity.

"Prior interest" means a preceding or senior interest, in time or in right, that is recorded with respect to the real property, including but not limited to a mortgage, easement, or other interest, lien, or encumbrance predating the recording of an environmental covenant.

"Record", used as a noun, means information that is inscribed on a tangible medium or that is stored in an electronic or other medium and is retrievable in perceivable form.

"State" means a state of the United States, the District of Columbia, Puerto Rico, the United States Virgin Islands, or any territory or insular possession subject to the jurisdiction of the United States.

(Source: P.A. 99-396, eff. 8-18-15.)

(765 ILCS 122/3)

Sec. 3. Nature of rights; subordination of interests.

- (a) An owner or owners of real property may voluntarily enter into an environmental covenant, as a grantor of an interest in the real property, with an agency and, if appropriate, one or more holders. No owner, agency, or other person shall be required to enter into an environmental covenant as part of an environmental response project; provided, however, that (i) failure to enter into an environmental covenant may result in disapproval of the environmental response project; and (ii) once the owner, agency, or other person assumes obligations in an environmental covenant they must comply with those obligations of the environmental covenant in accordance with this Act.
- (b) Any person, including a person that owns an interest in the real property, the agency, or a municipality or other

- unit of local government, may be a holder. An environmental covenant may identify more than one holder. The interest of a holder is an interest in real property.
- (c) A right of an agency under this Act or under an environmental covenant, other than a right as a holder, is not an interest in real property.
- (d) An agency is bound by any obligation it assumes in an environmental covenant, but an agency does not assume obligations merely by signing an environmental covenant. Any other person that signs an environmental covenant is bound by the obligations the person assumes in the covenant, but signing the covenant does not change obligations, rights, or protections granted or imposed under law other than this Act except as provided in the covenant.
- (e) The following rules apply to interests in real property in existence at the time an environmental covenant is created or amended:
 - (1) An interest that has priority under other law is not affected by an environmental covenant unless the person that owns the interest subordinates that interest to the covenant.
 - (2) This Act does not require a person that owns a prior interest to subordinate that interest to an environmental covenant or to agree to be bound by the covenant.
 - (3) A subordination agreement may be contained in an environmental covenant covering real property or in a separate record. If the environmental covenant covers commonly owned property in a common interest community, the record may be signed by any person authorized by the governing board of the owners association.
 - (4) An agreement by a person to subordinate a prior interest to an environmental covenant affects the priority of that person's interest but does not by itself impose any affirmative obligation on the person with respect to the environmental covenant.
- (f) Environmental covenants established under this Act shall be subject to eminent domain or condemnation proceedings by any agency of the State having a general grant of authority to acquire property by the exercise of the right of eminent domain under the laws of this State. No environmental covenant established under this Act shall be terminated or modified unless:
 - (1) The agency that signed the covenant is a party to the proceeding;
 - (2) All persons identified in Section $10\,(a)$ and (b) are given notice of the pendency of the proceeding; and
 - (3) The agency of the State exercising the right of eminent domain or condemnation determines, after hearing, that the termination or modification will not adversely affect human health or the environment.

(Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/4)

Sec. 4. Contents of environmental covenant.

- (a) An environmental covenant must:
- (1) State that the instrument is an environmental covenant executed pursuant to this Act.
- (2) Contain a legally sufficient description of the real property subject to the covenant.
- (3) Describe the activity and use limitations on the real property.
 - (4) Identify every holder.
- (5) Be signed by the agency, every holder, and unless waived by the agency every owner of the fee simple of the real property subject to the covenant.
 - (6) Identify the name and location of any

- administrative record for the environmental response project reflected in the environmental covenant.
- (b) In addition to the information required by subsection (a), an environmental covenant may contain other information, restrictions, and requirements agreed to by the persons who signed it, including any:
 - (1) Requirements for notice following transfer of a specified interest in, or concerning proposed changes in use of, applications for building permits for, or proposals for any site work affecting the contamination on, the property subject to the covenant.
 - (2) Requirements for periodic reporting describing compliance with the covenant.
 - (3) Rights of access to the property granted in connection with implementation or enforcement of the covenant.
 - (4) A brief narrative description of the contamination and remedy, including the contaminants of concern, the pathways of exposure, limits on exposure, and the location and extent of the contamination.
 - $\$ (5) Limitation on amendment or termination of the covenant in addition to those contained in Sections 9 and 10.
 - (6) Rights of the holder in addition to its right to enforce the covenant pursuant to Section 11.
- (c) In addition to other conditions for its approval of an environmental covenant, the agency may require those persons specified by the agency who have interests in the real property to sign the covenant.

(Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/5)

- Sec. 5. Validity; effect on other instruments.
- (a) An environmental covenant that complies with this Act runs with the land.
- (b) An environmental covenant that is otherwise effective is valid and enforceable even if:
 - (1) It is not appurtenant to an interest in real property.
 - (2) It can be or has been assigned to a person other than the original holder.
 - (3) It is not of a character that has been recognized traditionally at common law.
 - (4) It imposes a negative burden.
 - (5) It imposes an affirmative obligation on a person having an interest in the real property or on the holder.
 - (6) The benefit or burden does not touch or concern real property.
 - (7) There is no privity of estate or contract.
 - (8) The holder dies, ceases to exist, resigns, or is replaced.
 - (9) The owner of an interest subject to the environmental covenant and the holder are the same person.
- (c) An instrument that creates restrictions or obligations with respect to real property that would qualify as activity and use limitations except for the fact that the instrument was recorded before the effective date of this Act is not invalid or unenforceable because of any of the limitations on enforcement of interests described in subsection (b) or because it was identified as an easement, servitude, deed restriction, or other interest. This Act does not apply in any other respect to such an instrument.
- (d) This Act does not invalidate or render unenforceable any interest, whether designated as an environmental covenant or other interest, that is otherwise enforceable under the law of this State, including but not limited to interests

compliant with 35 Ill. Adm. Code 742, Subpart J. (Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/6)

Sec. 6. Relationship to other land-use law. This Act does not authorize a use of real property that is otherwise prohibited by zoning, by law other than this Act regulating use of real property, or by a recorded instrument that has priority over the environmental covenant. An environmental covenant may prohibit or restrict uses of real property which are authorized by zoning or by law other than this Act. (Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/7)

Sec. 7. Notice.

- (a) A copy of an environmental covenant shall be provided by the persons and in the manner required by the agency to:
 - (1) Each person that signed the covenant.
 - (2) Each person holding a recorded interest in the real property subject to the covenant.
 - $\hspace{0.1in}$ (3) Each person in possession of the real property subject to the covenant.
 - (4) Each municipality or other unit of local government in which real property subject to the covenant is located.
 - (5) Any other person the agency requires.
- (b) The validity of a covenant is not affected by failure to provide a copy of the covenant as required under this Section.

(Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/8)

Sec. 8. Recording.

- (a) An environmental covenant and any amendment or termination of the covenant must be recorded in every county in which any portion of the real property subject to the covenant is located. For purposes of indexing, a holder shall be treated as a grantee.
- (b) Except as otherwise provided in Section 9(c), an environmental covenant is subject to the laws of this State governing recording and priority of interests in real property.

(Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/9)

Sec. 9. Duration; amendment by court action.

- (a) An environmental covenant is perpetual unless it is:
- (1) By its terms limited to a specific duration or terminated by the occurrence of a specific event.
 - (2) Terminated by consent pursuant to Section 10.
 - (3) Terminated pursuant to subsection (b).
- (4) Terminated by foreclosure of an interest that has priority over the environmental covenant.
- (5) Terminated or modified in an eminent domain proceeding, but only if:
 - (A) The agency that signed the covenant is a party to the proceeding.
 - (B) All persons identified in Section 10(a) and (b) are given notice of the pendency of the proceeding.
 - (C) The court determines, after hearing, that the termination or modification will not adversely affect human health or the environment.
- (b) If the agency that signed an environmental covenant has determined that the intended benefits of the covenant can no longer be realized, a court, under the doctrine of changed circumstances, in an action in which all persons identified in

Section 10(a) and (b) have been given notice, may terminate the covenant or reduce its burden on the real property subject to the covenant. The agency's determination or its failure to make a determination upon request is subject to review pursuant to the Administrative Review Law.

- (c) Except as otherwise provided in subsections (a) and (b), an environmental covenant may not be extinguished, limited, or impaired through issuance of a tax deed, foreclosure of a tax lien, or application of the doctrine of adverse possession, prescription, abandonment, waiver, lack of enforcement, or acquiescence, or a similar doctrine.
- (d) An environmental covenant may not be extinguished, limited, or impaired by application of any Illinois Law concerning marketable title or dormant mineral interests. (Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/10)

- Sec. 10. Amendment or termination by consent.
- (a) An environmental covenant may be amended or terminated by consent only if the amendment or termination is signed by:
 - (1) The agency.
 - (2) Unless waived by the agency, the current owner of the fee simple of the real property subject to the covenant.
 - (3) Each person that originally signed the covenant, unless the person waived in a signed record the right to consent or a court finds that the person no longer exists or cannot be located or identified with the exercise of reasonable diligence.
 - (4) Except as otherwise provided in subsection
 - (d)(2), the holder.
- (b) If an interest in real property is subject to an environmental covenant, the interest is not affected by an amendment of the covenant unless the current owner of the interest consents to the amendment or has waived in a signed record the right to consent to amendments.
- (c) Except for an assignment undertaken pursuant to a governmental reorganization, assignment of an environmental covenant to a new holder is an amendment.
- (d) Except as otherwise provided in an environmental covenant:
 - $\hspace{0.1cm}$ (1) A holder may not assign its interest without consent of the other parties.
 - (2) A holder may be removed and replaced by agreement of the other parties specified in subsection (a).
- (3) A court of competent jurisdiction may fill a vacancy in the position of holder. (Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/11)

- Sec. 11. Enforcement of environmental covenant.
- (a) A civil action for injunctive or other equitable relief for violation of an environmental covenant may be maintained by:
 - (1) A party to the covenant.
 - (2) The agency or, if it is not the agency, the Illinois Environmental Protection Agency.
 - (3) Any person to whom the covenant expressly grants power to enforce.
 - (4) A person whose interest in the real property or whose collateral or liability may be affected by the alleged violation of the covenant.
 - (5) A municipality or other unit of local government in which the real property subject to the covenant is located.
 - (6) Any agency that is enforcing the terms of any court or Board order.

- (b) This Act does not limit the regulatory authority of the agency or the Illinois Environmental Protection Agency under law other than this Act with respect to an environmental response project.
- (c) A person is not responsible for or subject to liability for environmental remediation solely because it has the right to enforce an environmental covenant. (Source: P.A. 99-396, eff. 8-18-15.)

(765 ILCS 122/12)

Sec. 12. Registry; substitute notice.

- (a) The Illinois Environmental Protection Agency shall establish and maintain a registry that contains all environmental covenants and any amendment or termination of those covenants. The registry may also contain any other information concerning environmental covenants and the real property subject to them which the Illinois Environmental Protection Agency considers appropriate. The registry is a public record for purposes of the Freedom of Information Act.
- (b) After an environmental covenant or an amendment or termination of a covenant is filed in the registry established pursuant to subsection (a), a notice of the covenant, amendment, or termination that complies with this Section may be recorded in the land records in lieu of recording the entire covenant. Any such notice must contain:
 - (1) A legally sufficient description and any available street address of the real property subject to the covenant.
 - (2) The name and address of the owner of the fee simple interest in the real property, the agency, and the holder if other than the agency.
 - (3) A statement that the covenant, amendment, or termination is available in a registry at the Environmental Protection Agency at its office in Springfield, which discloses the method of any electronic access.
 - (4) A statement that the notice is notification of an environmental covenant executed pursuant to this Act.
- (c) A statement in substantially the following form, executed with the same formalities as a deed in this State, satisfies the requirements of subsection (b):
 - (1) This notice is filed in the land records of (insert name of county in which the real property is located) pursuant to Section 12 of the Uniform Environmental Covenants Act.
 - (2) This notice and the covenant, amendment or termination to which it refers may impose significant obligations with respect to the property described below.
 - (3) A legal description of the property is attached as Exhibit A to this notice. The address of the property that is subject to the environmental covenant is (insert address of property).
 - (4) The name and address of the owner of the fee simple interest in the real property on the date of this notice is (insert name of current owner of the property and the owner's current address as shown on the tax records of the jurisdiction in which the property is located).
 - (5) The environmental covenant, amendment or termination was signed by (insert name and address of the agency).
 - (6) The environmental covenant, amendment, or termination was filed in the registry on (insert date of filing).
 - (7) The full text of the covenant, amendment, or termination and any other information required by the agency is on file and available for inspection and copying

in the registry maintained for that purpose by the Illinois Environmental Protection Agency at (insert address and room of buildings in which the registry is maintained). The covenant, amendment or termination may be found electronically at (insert web address for covenant). (Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/13)

Sec. 13. Uniformity of application and construction. In applying and construing this uniform Act, consideration must be given to the need to promote uniformity of the law with respect to its subject matter among states that enact it. (Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/14)

Sec. 14. Relation to Electronic Signatures in Global and National Commerce Act. This Act modifies, limits, or supersedes the federal Electronic Signatures in Global and National Commerce Act (15 U.S.C. Section 7001 et seq.) but does not modify, limit, or supersede Section 101 of that Act (15 U.S.C. Section 7001(a)) or authorize electronic delivery of any of the notices described in Section 103 of that Act (15 U.S.C. Section 7003(b)).

(Source: P.A. 95-845, eff. 1-1-09.)

(765 ILCS 122/15)

Sec. 15. Severability. If any provision of this Act or its application to any person or circumstance is held invalid, the invalidity does not affect other provisions or applications of this Act which can be given effect without the invalid provision or application, and to this end the provisions of this Act are severable.

(Source: P.A. 95-845, eff. 1-1-09.)

Top

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Appendix B
IEPA Model Environmental
Land Use Control

PREPARED BY:
Name:
Address:
RETURN TO:
Name:
Address:
THE ABOVE SPACE FOR RECORDER'S OFFICE
Model Environmental Land Use Control
THIS ENVIRONMENTAL LAND USE CONTROL ("ELUC"), is made this day of, 20, by ("Property Owner") of the real property located at the common address ("Property").
WHEREAS, 415 ILCS 5/58.17 and 35 Ill. Adm. Code 742 provide for the use of an ELUC as an institutional control in order to impose land use limitations or requirements related to environmental contamination so that persons conducting remediation can obtain a No Further Remediation determination from the Illinois Environmental Protection Agency ("IEPA"). The reason for an ELUC is to ensure protection of human health and the environment. The limitations and requirements contained herein are necessary in order to protect against exposure to contaminated soil or groundwater, or both, that may be present on the property as a result of [VARIABLE] activities. Under 35 Ill. Adm. Code 742, the use of risk-based, site-specific remediation objectives may require the use of an ELUC on real property, and the ELUC may apply to certain physical features (e.g., engineered barriers, monitoring wells, caps, etc.).
WHEREAS, [the party performing remediation] intends to request risk-based, site specific soil and groundwater remediation objectives from IEPA under 35 Ill. Adm. Code 742 to obtain risk-based closure of the site, identified by Bureau of Land [10-digit LPC or Identification number], utilizing an ELUC.
NOW, THEREFORE, the recitals set forth above are incorporated by reference as if fully set forth herein, and the Property Owner agrees as follows:
Section One. Property Owner does hereby establish an ELUC on the real estate, situated in the County of , State of Illinois and further described in Exhibit A attached hereto and incorporated herein by reference (the "Property").
Attached as Exhibit B are site maps that show the legal boundary of the Property, any physical features to which the ELUC applies, the horizontal and vertical extent of the

contaminants of concern above the applicable remediation objectives for soil or groundwater or both, and the nature, location of the source, and direction of movement of the contaminants of concern, as required under 35 Ill. Adm. Code 742.

Section Two. Property Owner represents and warrants **he/she** is the current owner of the Property and has the authority to record this ELUC on the chain of title for the Property with the Office of the Recorder or Registrar of Titles in ______ County, Illinois.

Section Three. The Property Owner hereby agrees, for himself/herself, and his/her heirs, grantees, successors, assigns, transferees and any other owner, occupant, lessee, possessor or user of the Property or the holder of any portion thereof or interest therein, that [INSERT RESTRICTION (e.g. the groundwater under the Property shall not be used as a potable supply of water, and any contaminated groundwater or soil that is removed, excavated, or disturbed from the Property described in Exhibit A herein must be handled in accordance with all applicable laws and regulations)].

Section Four. This ELUC is binding on the Property Owner, **his/her** heirs, grantees, successors, assigns, transferees and any other owner, occupant, lessee, possessor or user of the Property or the holder of any portion thereof or interest therein. This ELUC shall apply in perpetuity against the Property and shall not be released until the IEPA determines there is no longer a need for this ELUC as an institutional control; until the IEPA, upon written request, issues to the site that received the no further remediation determination a new no further remediation determination approving modification or removal of the limitation(s) or requirement(s); the new no further remediation determination is filed on the chain of title of the site subject to the no further remediation determination; and until a release or modification of the land use limitation or requirement is filed on the chain of title for the Property.

Section Five. Information regarding the remediation performed on the Property may be obtained from the IEPA through a request under the Freedom of Information Act (5 ILCS 140) and rules promulgated thereunder by providing the IEPA with the [10-digit LPC or identification number] listed above.

Section Six. The effective date of this ELUC shall be the date that it is officially recorded in the chain of title for the Property to which the ELUC applies.

WITNESS the following signatures:	
Property Owner(s)	
By:	
Its:	
Date:	

STATE OF ILLINOIS	,	
COUNTY OF) SS:	
COUNTY OF)	
_		
	the undersigned, a Nota	
and State, DO HEREE	BY CERTIFY, that	and
	ne to be the Property Owner(s) of	
	e to be the same persons whose names are s	
11	before me this day in person and severally and delivered the said instrument as their fre in set forth.	<u> </u>
Given under my	hand and official seal, this day of	, 20

PIN NO. XX-XXX-XXXX-XXXX (Parcel Index Number)

Exhibit A

The subject property is located in the City of	_,	County, State of
Illinois, commonly known as	,	, Illinois and
more particularly described as:		
LIST THE COMMON ADDRESS;		
LEGAL DESCRIPTION; AND		
REAL ESTATE TAX INDEX OR PARCEL #		
(PURSUANT TO SECTION 742. 1010(D)(2))		

PIN NO. XX-XX-XXX-XXXX

Exhibit B

IN ACCORDANCE WITH SECTION 742.1010(D)(8)(A)-(D), PROVIDE ALL THE FOLLOWING ELEMENTS. ATTACH SEPARATE SHEETS, LABELED AS EXHIBIT B, WHERE NECESSARY.

- (A) A scaled map showing the legal boundary of the property to which the ELUC applies.
- (B) Scaled maps showing the horizontal and vertical extent of contaminants of concern above the applicable remediation objectives for soil and groundwater to which the ELUC applies.
- (C) Scaled maps showing the physical features to which an ELUC applies (e.g., engineered barriers, monitoring wells, caps, etc.).
- (D) Scaled maps showing the nature, location of the source, and direction of movement of the contaminants of concern.

Appendix C 2019 Environmental Land Use Control (to be developed)